

FORM PTO 190 (REV 5-98)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. §371		ATTORNEY DOCKET NUMBER 2001_1229A	
		U.S. APPLICATION NO. (if known, see P. 1) NEW 09/914619	
International Application No. PCT/IP00/01217	International Filing Date March 2, 2000	Priority Date Claimed March 4, 1999	
Title of Invention CRYSTALS AND STRUCTURAL COORDINATES OF PROTEIN COMPLEX AND UTILIZATION OF THE STRUCTURAL COORDINATES			
Applicant(s) For DO/EO/US Masaharu ARITOMI, Naoki KUNISHIMA and Kosuke MORIKAWA			
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:			
1. <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a filing under 35 U.S.C. §371. 2. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. §371. 3. <input type="checkbox"/> This express request to begin national examination procedures (35 U.S.C. §371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. §371(b) and PCT Articles 22 and 39(1). 4. <input checked="" type="checkbox"/> A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date. 5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. §371(c)(2)). a. <input type="checkbox"/> is transmitted herewith (required only if not transmitted by the International Bureau). b. <input checked="" type="checkbox"/> has been transmitted by the International Bureau. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US) 6. <input checked="" type="checkbox"/> A translation of the International Application into English (35 U.S.C. §371(c)(2)). ATTACHMENT A a. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. §371(c)(3)). b. <input type="checkbox"/> are transmitted herewith (required only if not transmitted by the International Bureau). c. <input type="checkbox"/> have been transmitted by the International Bureau. d. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. e. <input type="checkbox"/> have not been made and will not be made. 7. <input type="checkbox"/> A translation of the amendments to the claims under PCT Article 19. 8. <input checked="" type="checkbox"/> An unexecuted oath or declaration of the inventor(s) (35 U.S.C. §371(c)(4)). ATTACHMENT B 9. <input type="checkbox"/> A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. §371(c)(5)).			
Items 11. to 14. below concern other document(s) or information included:			
11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. ATTACHMENT C 12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. <input type="checkbox"/> A FIRST preliminary amendment. <input type="checkbox"/> A SECOND or SUBSEQUENT preliminary amendment. 14. <input type="checkbox"/> Other items or information:			

THE COMMISSIONER IS AUTHORIZED
 TO CHARGE ANY DEFICIENCY IN THE
 FEE FOR THIS PAPER TO DEPOSIT
 ACCOUNT NO. 23-0875

09/914619

INTERNATIONAL APPLICATION NO.
PCT/JP00/01217ATTORNEY'S DOCKET NO.
2001 1229A

The following fees are submitted

CALCULATIONS

PTO USE ONLY

BASIC NATIONAL FEE (37 CFR 1.492(a)(1)-(5)):

Neither international preliminary examination fee nor international search fee paid to USPTO
and International Search Report not prepared by the EPO or JPO \$1000.00
International Search Report has been prepared by the EPO or JPO \$ 860.00
International preliminary examination fee not paid to USPTO but international search
paid to USPTO \$ 710.00
International preliminary examination fee paid to USPTO but claims did not satisfy provisions
of PCT Article 33(1)-(4) \$ 690.00
International preliminary examination fee paid to USPTO and all claims satisfied provisions of
PCT Article 33(1)-(4) \$ 100.00

ENTER APPROPRIATE BASIC FEE AMOUNT =

\$860.00

Surcharge of \$130.00 for furnishing the oath or declaration later than ☐ 20 ☐ 30 months from the earliest
claimed priority date (37 CFR 1.492(e)).

\$

Claims	Number Filed	Number Extra	Rate	
Total Claims	49 -20 =	29	X \$18.00	\$522.00
Independent Claims	- 3 =		X \$80.00	\$
Multiple dependent claim(s) (if applicable)			+ \$270.00	\$270.00

TOTAL OF ABOVE CALCULATIONS =

\$1,652.00

☐ Small Entity Status is hereby asserted. Above fees are reduced by 1/2.

\$

SUBTOTAL =

\$1,652.00

Processing fee of \$130.00 for furnishing the English translation later than ☐ 20 ☐ 30 months from the earliest
claimed priority date (37 CFR 1.492(f)).

\$

TOTAL NATIONAL FEE =

\$1,652.00

Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an
appropriate cover sheet (37 CFR 3.28, 3.31). \$40 per property +

\$

TOTAL FEES ENCLOSED =

\$1,652.00

Amount to be refunded \$

Amount to be charged \$

a. ☒ A check in the amount of \$1,652.00 to cover the above fees is enclosed. A duplicate copy of this form is enclosed.

b. ☐ Please charge my Deposit Account No. 23-0975 in the amount of \$_____ to cover the above fees.
A duplicate copy of this sheet is enclosed.

c. ☐ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any
overpayment to Deposit Account No. 23-0975.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or
(b)) must be filed and granted to restore the application to pending status.

19. CORRESPONDENCE ADDRESS

000513

PATENT/TRADEMARK OFFICE

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August 31, 2001

[CHECK NO. 46243]

[2001_1229A]



1605
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7a

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE **RECEIVED**

In re application of :

DEC 07 2001

Masaharu ARITOMI et al. :

Docket No. 2001-1229A

TECH CENTER 1600/2900

Serial No. 09/914,619 :

Group Art Unit Not Yet Assigned

Filed August 31, 2001 :

Examiner Not Yet Assigned

CRYSTALS AND STRUCTURAL
COORDINATES OF PROTEIN
COMPLEX AND UTILIZATION OF
THE STRUCTURAL COORDINATES

THE COMMISSIONER IS AUTHORIZED
TO CHARGE ANY DEFICIENCY IN THE
FEES FOR THIS PAPER TO DEPOSIT
ACCOUNT NO. 23-0975

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents,
Washington, D.C. 20231

Sir:

Responsive to the Notice dated October 31, 2001, please amend the above-identified
application as follows:

In the Specification:

Page 1, immediately after the Title, please insert:

This application is a 371 of PCT/JP00/01217 filed March 2, 2000.

In the Sequence Listing:

Please replace the Sequence Listing of record pages 1-4 with the attached substitute
Sequence Listing consisting of pages 1-3.

REMARKS

The foregoing amendments are presented to place the application in compliance with the sequence rules under 37 CFR 1.821-1.825.

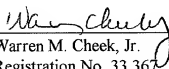
Applicants have submitted a revised Sequence Listing in both paper and computer readable form as required by 37 C.F.R. 1.821(c) and (e). The content of the paper and computer readable copies are the same and no new matter has been added.

In view of the foregoing, it is believed that each requirement set forth in the Notice has been satisfied, and that the application is now in compliance with the sequence rules under 37 CFR 1.821-1.825. Accordingly, favorable examination on the merits is respectfully requested.

Respectfully submitted,

Masaharu ARITOMI et al.

By: _____


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December 4, 2001



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DEC 07 2001

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SEQUENCE LISTING

<110> Biomolecular Engineering Research Institute

<120> Crystals and structural coordinates of protein complex and utilization of the structural coordinates

<130> 2001-1229A/WMC/0177

<140> 09/914,619

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<150> JP 56905/1999

<151> 1999-03-04

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 Cys Gln Thr Gln Gly Asp Ser Ile Leu Asp Cys Val Pro Lys Asp Gly
 50 55 60
 Gln Ser His Cys Cys Ile Pro Arg Lys His Leu Leu Leu Tyr Gln Asn
 65 70 75 80
 Met Gly Ile Trp Val Gln Ala Glu Asn Ala Leu Gly Thr Ser Met Ser
 85 90 95
 Pro Gln Leu Cys Leu Asp Pro Met Asp Val Val Lys Leu Glu Pro Pro
 100 105 110
 Met Leu Arg Thr Met Asp Pro Ser Pro Glu Ala Ala Pro Pro Gln Ala
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 Gly Cys Leu Gln Leu Cys Trp Glu Pro Trp Gln Pro Gly Leu His Ile
 130 135 140
 Asn Gln Lys Cys Glu Leu Arg His Lys Pro Gln Arg Gly Glu Ala Ser
 145 150 155 160
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 Cys Gly Leu Leu Pro Ala Thr Ala Tyr Thr Leu Gln Ile Arg Cys Ile
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210						215									

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<input type="checkbox"/> Download from the USPTO, Internet-Based Trademark Examination Office, Washington, D.C. 20535, www.uspto.gov		
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U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
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09/914,619

Masaharu Aritomi

2001-1229A

INTERNATIONAL APPLICATION NO.

PCT/JP00/01217

LA. FILING DATE

03/02/2000

PRIORITY DATE

03/04/1999

00513

WENDEROTH, LIND & PONACK, L.L.P.

2033 K STREET N. W.

SUITE 800

WASHINGTON, DC 20006-1021

CONFIRMATION NO. 8337

371 FORMALITIES LETTER



00000000006968577

Date Mailed: 10/31/2001

NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as an Elected Office (37 CFR 1.495):

- U.S. Basic National Fees
- Priority Document
- Biochemical Sequence Listing
- Copy of IPE Report
- Copy of references cited in ISR
- Copy of the International Application
- Copy of the International Search Report
- Information Disclosure Statements
- Oath or Declaration

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date. The current oath or declaration does not comply with 37 CFR 1.497(a) and (b) in that it:
 - Is not executed in accordance with either 37 CFR 1.66 or 37 CFR 1.68.
- The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):
 - A copy of the "Sequence Listing" in computer readable form has not been submitted by 37 CFR 1.821(e).
 - APPLICANT MUST PROVIDE:

- An initial or substitute computer readable form (CRF) of the "Sequence Listing."
- A statement that the contents of the paper or compact disc and the computer readable form are the same and, where applicable, include no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b) or 1.825(d).

- For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:
 - For Rules Interpretation, call (703) 308-4216
 - To Purchase PatentIn Software, call (703) 306-2600
 - For PatentIn Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTH FROM THE DATE OF THIS NOTICE OR BY 22 or 32 MONTHS (where 37 CFR 1.495 applies) FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

BARBARA A CAMPBELL

Telephone: (703) 305-3631

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
09/914,619	PCT/JP00/01217	2001-1229A

09914619-091901

09914619-091901

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DESCRIPTION

Crystals and structural coordinates of protein complex and
utilization of the structural coordinates

5

TECHNICAL FIELD

09914619-001901

The present invention relates to crystals of a complex
between granulocyte colony-stimulating factor (hereinafter
abbreviated as G-CSF) and the G-CSF binding region
10 (hereinafter abbreviated as CRH-G-CSF-R) of the granulocyte
colony-stimulating factor receptor (hereinafter abbreviated
as G-CSF-R) and also relates to three-dimensional structure
coordinates of the complex between G-CSF and CRH-G-CSF-R
obtained by crystallography techniques using a X-ray
15 diffraction method with said crystals of the complex.

The present invention also relates to designing,
selecting, and searching for G-CSF variants which bind to
G-CSF-R and in which one or more amino acid residues in
native G-CSF have been substituted, deleted, inserted, or
20 chemically modified, by means of the three-dimensional
structure coordinates of the complex between G-CSF and CRH-
G-CSF-R.

The present invention further relates to identifying,
searching for, evaluating, or designing compounds which
25 bind to G-CSF-R and which are agonists of G-CSF having

biological activities equal or superior to those of G-CSF, by means of the three-dimensional structure coordinates of the complex between G-CSF and CRH-G-CSF-R.

In addition, the present invention relates to identifying, searching for, evaluating, or designing compounds which bind to G-CSF and/or G-CSF-R and which are antagonists inhibiting normal binding of G-CSF to G-CSF-R and thereby reducing the effects of G-CSF, by means of the three-dimensional structure coordinates of the complex between G-CSF and CRH-G-CSF-R.

BACKGROUND ART

"Cytokine" is the general term for proteinaceous factors which exhibit biological activities at a very small amount by binding to the specific receptors expressed on the cell surface. G-CSF is one of such cytokines and regulates the differentiation and proliferation of a blood cell group primarily classified as granulocytes existing in blood (Metcalf, D., *Nature*, **339**:27-30 (1989)). Genetic analyses of G-CSF revealed that it is a protein consisting of about 180 amino acid residues (Nagata, S. *et al.*, *Nature*, **319**:415-318 (1989); Souza, L. M. *et al.* *Science*, **232**:61-65 (1986); and Japanese Patent Kohyo Publication No. S63-500636 (1988)).

This factor is generally produced in *Escherichia coli*

or animal cells using gene manipulation and it is also commercially available as a reagent for use in scientific experiments. Furthermore, G-CSF has come into practical use as a medicine for patients having a decreased number of leukocytes such as granulocytes, for example, due to chemotherapy or radiotherapy of cancer to restore the number of leukocytes.

Since the medicine of GSF is a protein preparation, however, it is expensive. Therefore, G-CSF variant having sufficiently high biological activities to exert its efficacy at a less amount is being required. Furthermore, the G-CSF preparation in practical use cannot be orally administered because it is proteinaceous. In fact, the preparation is administered via intravenous or subcutaneous injection. Such a preparation cannot be administered by the patients themselves, and it has to be administered by a health professional such as a physician. In addition, such administration routes cause the patient's pain. Thus, an agonist having G-CSF biological activities which can be administered by a easier route of administration, for example, by oral administration, is being desired.

Likewise, an antagonist which inhibits the activities of G-CSF is also being desired as a medicine which can be administered, for example, when leukocytes such as granulocytes abnormally proliferate.

On the other hand, G-CSF-R, which has a function of transmitting the activities of G-CSF to cells, exists on the surfaces of G-CSF-responsive cells, and is a protein consisting of about 800 amino acid residues. G-CSF-R has an ability to bind with G-CSF at a particular region that exists extracellularly. This region has an amino acid sequence similar to those of other cytokine receptors, and is generally known as a cytokine-receptor homology (CRH) region. cDNAs encoding G-CSF-Rs derived from mouse and human have been cloned and their nucleotide sequences have been determined (Fukunaga, R. et al., *Cell*, **61**:341-350 (1990); Fukunaga, R. et al., *Proc. Natl. Acad. Sci. USA*, **87**:8702-8706 (1990); and WO 91/14776). The CRH region is a homology region consisting of about 200 amino acid residues which is found in extracellular regions of cytokine receptors such as those for interleukins 2 to 7, erythropoietin, growth hormone, GM-CSF, and interferons α , β , and γ , and represents ligand binding sites of these receptors. These receptors are collectively called the cytokine receptor family (Bazan, J. F., *Proc. Natl. Acad. Sci. USA*, **87**:6934-6938 (1990)).

The CRH regions are considered as the most critical domains for ligand binding and signal transduction of this family. Elucidation of binding between the CRH regions of receptors and their ligands are, therefore, essential to

elucidate the interactions between the ligands and the whole receptors.

The signals resulted from ligand binding of these receptors are transmitted to the intracellular moiety of the receptors to activate phosphorylating enzymes in the cells. The signals are further transduced through a pathway in which specific proteins in the cells are phosphorylated by those phosphorylating enzymes. It is described that biological activities of G-CSF also result from the activation of an intracellular phosphorylating enzyme stimulated by G-CSF binding to G-CSF-R.

Three-dimensional structure coordinates of G-CSF are publicly known (Hill, C. P., et al., *Proc. Natl. Acad. Sci. USA*, **90**:5167-5171 (1993); Protein Data Bank Entry Number: 1hrg). Three-dimensional structure coordinates of a part of G-CSF-R have also been revealed (Yamasaki, K. et al., *Nat. Struct. Biol.*, **4**:498-404 (1997); Protein Data Bank Entry Number: 1gcf). Furthermore, for some cytokines other than G-CSF, a crystal structure of a complex between, for example, growth hormone and the extracellular portion of its receptor has also been solved (de Vos, A. M. et al., *Science*, **255**:306-312 (1992); Protein Data Bank Entry Number: 3hhr).

In spite of such information, three-dimensional structure coordinates of the complex between G-CSF and G-

CSF-R itself were not known, and therefore, details of chemical interactions between G-CSF and G-CSF-R in three-dimensional space could not be logically understood. Specifically, although structure coordinates of G-CSF have been solved and a method for producing variants based on the structure coordinates has also been disclosed as described in Japanese Patent Kohyo Publication No. H8-50618 (1996), the prior invention described in the patent publication does not give a precise picture of the chemical interactions with the receptor side, and therefore, could not enable us to produce variants taking into account the receptor side in three-dimensional space. Similarly, other approaches such as those described in Japanese Patent Kokai Publication Nos. H6-309385 (1994) and H7-133233 (1995) could not enable us to design agonists or antagonists of G-CSF, because three-dimensional structure coordinates of the complex between G-CSF and G-CSF-R were not known.

SUMMARY OF THE INVENTION

In order to solve the above problems, the present inventors prepared crystals of the complex between G-CSF and CRH-G-CSF-R and revealed three-dimensional structure coordinates of the complex between G-CSF and CRH-G-CSF-R for the first time. Since CRH-G-CSF-R can be considered as an equivalent of G-CSF-R in respect to interactions with G-

CSF, the three-dimensional structure coordinates can reveal for the first time details of chemical interactions between G-CSF and G-CSF-R in three-dimensional space.

Thus, according to the present invention, a detailed mechanism for transduction of stimulus by G-CSF can be revealed, and one can design a variant G-CSF having higher activities or inhibiting G-CSF activities by altering one or more amino acid residues in the G-CSF protein on the basis of the three-dimensional structure coordinates. Furthermore, according to the present invention, it becomes possible to identify, search for, evaluate, or design an agonist having G-CSF biological activities or an antagonist inhibiting G-CSF biological activities on the basis of the three-dimensional structure coordinates.

Accordingly, the present invention relates to crystals of the protein complex between G-CSF and CRH-G-CSF-R.

The present invention also relates to three-dimensional structure coordinates of the complex formed by G-CSF and CRH-G-CSF-R for use in identifying, searching for, evaluating, or designing a variant, agonist, or antagonist of G-CSF.

The present invention further relates to a computer storage medium storing all or part of the above three-dimensional structure coordinates for use in identifying, searching for, evaluating, or designing a variant, agonist,

or antagonist of G-CSF.

The present invention further relates to use of all or part of the above three-dimensional structure coordinates or the above computer storage medium for identifying, searching for, evaluating, or designing a variant, agonist, or antagonist of G-CSF.

The present invention further relates to a method of identifying, searching for, evaluating, or designing a G-CSF variant which has biological activities equal or superior to those of native G-CSF and in which one or more amino acid residues have been substituted, deleted, inserted, or chemically modified, the method being characterized in that it uses all or part of the above three-dimensional structure coordinates or the above computer storage medium.

The present invention further relates to a method of identifying, searching for, evaluating, or designing a G-CSF variant which has activities as an antagonist of G-CSF and in which one or more amino acid residues have been substituted, deleted, inserted, or chemically modified, the method being characterized in that it uses all or part of the above three-dimensional structure coordinates or the above computer storage medium.

The present invention further relates to a method of identifying, searching for, evaluating, or designing an

09914619.091901

agonist of G-CSF, the method being characterized in that it uses all or part of the above three-dimensional structure coordinates or the above computer storage medium.

The present invention further relates to a method of identifying, searching for, evaluating, or designing an antagonist of G-CSF, the method being characterized in that it uses all or part of the above three-dimensional structure coordinates or the above computer storage medium.

BRIEF DESCRIPTION OF DRAWING

Fig. 1 is a ribbon drawing of the crystal structure of G-CSF and CRH-G-CSF-R complex showing their backbones viewed from a direction approximately orthogonal to the pseudo-twofold axis of the molecules.

Fig. 2 is a ribbon drawing of the crystal structure of G-CSF and CRH-G-CSF-R complex showing their backbones viewed from a direction approximately parallel to the non-crystallographic pseudo-twofold axis of the molecules.

In Fig. 3, one of the two molecules existing in an asymmetric unit (that is, one molecule of the complex between Molecules A and B, and one molecule of the complex between Molecules C and D) has been displaced onto the other in such a way that the G-CSF portions of respective molecules (Molecule A and Molecule C) are best superposed. This figure schematically represents the backbones of such

structures.

BEST MODE FOR CARRYING OUT THE INVENTION

In the present specification, amino acids, peptides,
5 and proteins are described using the following
abbreviations adopted by IUPAC-IUB Commission on
Biochemical Nomenclature (CBN). Unless otherwise specified,
sequence of amino acid residues in a peptide or protein is
indicated from its N-terminus to its C-terminus in the
10 left-to-right direction, with the N-terminus being numbered
1.

A or Ala: alanine residue

D or Asp: aspartic acid residue

E or Glu: glutamic acid residue

15 F or Phe: phenylalanine residue

G or Gly: glycine residue

H or His: histidine residue

I or Ile: isoleucine residue

K or Lys: lysine residue

20 L or Leu: leucine residue

M or Met: methionine residue

N or Asn: asparagine residue

P or Pro: proline residue

Q or Gln: glutamine residue

25 R or Arg: arginine residue

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S or Ser: serine residue

T or Thr: threonine residue

V or Val: valine residue

W or Trp: tryptophan residue

5 Y or Tyr: tyrosine residue

C or Cys: cysteine residue

1. Crystals of the complex between G-CSF and CRH-G-CSF-R

10 G-CSF and CRH-G-CSF-R used in the present invention are mammalian types, preferably a mouse or a human type, and particularly preferably a human type.

15 Although "CRH-G-CSF-R" refers to a region from tyrosine residue at position 97 to alanine residue at position 309 in the amino acid sequence of mouse-type G-CSF-R or to corresponding regions of other mammalian type G-CSF-Rs, the beginning and ending positions of CRH-G-CSF-R are not necessarily strict and do not have any great impact on the stereostructure of CRH-G-CSF-R as a whole. The term "CRH-G-CSF-R" includes those regions in which the N-terminus and/or the C-terminus is shifted in either direction by several residues, or those regions in which several amino acid residues are added to the N-terminus and/or the C-terminus, provided that they retain the functions. Usually, such differences in the primary
25 sequence will not have any great effect on the

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stereostructure of CRH-G-CSF-R as a whole, and the function is therefore expected to be retained. In the examples described below, the region from alanine residue at position 95 to alanine residue at position 309 in the above amino acid sequence was used for mouse-type CRH-G-CSF-R.

The most popular technique for elucidating three-dimensional structure of a protein is X-ray crystallography. In this technique, a crystallized protein is applied to monochromated X-ray to obtain X-ray diffraction patterns based on which three-dimensional structure of the protein is elucidated (Blundell, T. L. and Johnson, L. N., PROTEIN CRYSTALLOGRAPHY, pp. 1-565, 1976, Academic Press, New York).

Crystallization exploits a protein's property of precipitating as crystals under certain conditions when a protein in solution becomes undissolved, for example, by addition of a precipitant to a protein solution or by reducing the volume of solvent through evaporation or the like. A highly purified protein is required for crystallization. In addition, physical and chemical factors such as protein concentration, salt concentration, hydrogen ion concentration (pH), type of precipitant added, temperature, and the like are involved in conditions under which crystallization occurs. Furthermore, there are many crystallization techniques such as batch, dialysis, and vapor-diffusion procedures depending on the method of

adding a precipitant or of regulating the volume of solvent (Blundell, T. L. and Johnson, L. N., PROTEIN CRYSTALLOGRAPHY, pp. 59-82, 1976, Academic Press, New York). Thus, in order to obtain a protein crystal suitable for X-ray crystallography, it is necessary for each protein to obtain a highly purified protein and to make a study for optimizing various factors and the crystallization techniques.

The crystals of the present invention between human-type G-CSF and mouse-type CRH-G-CSF-R are prepared as follows.

First, human-type G-CSF and mouse-type CRH-G-CSF-R are highly purified. Purified proteins are then combined with each other and allowed to form a complex. The complex is further purified to a high purity so that it becomes suitable for crystallization. Purification methods which may be used alone or in combination are those methods commonly used in the art for purifying proteins such as column chromatography (affinity, hydrophobic, ion exchange, gel filtration, and the like), salting out, centrifugation, and electrophoresis. The purification steps after the formation of the complex have to be conducted while retaining the complex. It is, therefore, preferred to use purification methods which allow the salt and hydrogen ion concentrations to be adjusted to values more similar to the

physiological conditions, for example, gel filtration chromatography.

Secondly, crystals of the complex between G-CSF and CRH-G-CSF-R are prepared. This step may be conducted using a crystallization technique such as a batch, dialysis, or vapor-diffusion procedure. It is also necessary to determine physical and chemical factors such as protein concentration, salt concentration, hydrogen ion concentration (pH), type of precipitant added, temperature, and the like.

For crystallization of the complex between G-CSF and CRH-G-CSF-R, it is essential to conduct the crystallization under conditions which retain the complex. For example, crystals of the complex between G-CSF and CRH-G-CSF-R are obtained by a vapor-diffusion method using a 1.0 to 1.2 M concentration of ammonium sulfate as a precipitant under conditions of pH=7 to 8, a protein concentration of 0.5 to 2 mg/ml, and a temperature of 20°C. Furthermore, under the same conditions containing 2 to 10 % 1,4-dioxane added thereto, larger crystals suitable for X-ray crystallography are obtained.

However, since it is well known to those skilled in the art that the same protein may crystallize under different conditions, the present invention is not limited to such conditions, and crystals of the complex between G-

CSF and CRH-G-CSF which provide crystallographic constants substantially identical to those of the present invention are within the scope of the present invention.

5 2. Structure coordinates of the complex between G-CSF and CRH-G-CSF-R

Structure of the crystal of the complex between G-CSF and CRH-G-CSF-R thus obtained is analyzed using X-ray crystal structure analysis techniques known to those skilled in the art.

10 The crystal of the complex between human-type G-CSF shown in SEQ ID NO: 1 and mouse-type CRH-G-CSF-R shown in SEQ ID NO: 2 belongs to the tetragonal space group of $I4_122$, with unit cell parameters of $125 \pm 10 \text{ \AA}$ in the a- and b-axis directions and $373 \pm 10 \text{ \AA}$ in the c-axis direction.

15 The crystal of the complex is further subjected to crystal structure analysis by X-ray diffraction to obtain the three-dimensional structure coordinates of the present invention (values indicating relative spatial positions of

20 each atoms) of the complex between G-CSF and CRH-G-CSF-R. The structure coordinates obtained are shown in Table 1 according to a notation system for three-dimensional structure coordinates of a protein commonly used in the art.

Table 1

25 Three-dimensional structure coordinates obtained from a

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crystal of the complex between G-CSF and CRH-G-CSF-R

CRYST 125.467 125.467 372.771 90.00 90.00 90.00 I4122

	ATOM	1	N	GLY	A	5	42.132	17.880	130.316	1.00	133.67
	ATOM	2	CA	GLY	A	5	42.499	19.310	130.545	1.00	128.23
5	ATOM	3	C	GLY	A	5	42.600	20.009	129.205	1.00	124.12
	ATOM	4	O	GLY	A	5	42.468	19.336	128.180	1.00	126.65
	ATOM	5	N	PRO	A	6	42.826	21.337	129.172	1.00	116.53
	ATOM	6	CA	PRO	A	6	42.941	22.107	127.925	1.00	103.69
	ATOM	7	C	PRO	A	6	44.270	21.826	127.220	1.00	87.76
10	ATOM	8	O	PRO	A	6	44.982	22.745	126.807	1.00	87.46
	ATOM	9	CB	PRO	A	6	42.844	23.555	128.416	1.00	106.53
	ATOM	10	CG	PRO	A	6	43.539	23.495	129.739	1.00	114.75
	ATOM	11	CD	PRO	A	6	42.974	22.220	130.346	1.00	117.42
	ATOM	12	N	ALA	A	7	44.589	20.543	127.085	1.00	68.32
15	ATOM	13	CA	ALA	A	7	45.826	20.096	126.464	1.00	50.41
	ATOM	14	C	ALA	A	7	45.768	20.281	124.953	1.00	42.66
	ATOM	15	O	ALA	A	7	44.692	20.413	124.384	1.00	49.20
	ATOM	16	CB	ALA	A	7	46.070	18.630	126.807	1.00	34.60
	ATOM	17	N	SER	A	8	46.929	20.310	124.310	1.00	26.14
20	ATOM	18	CA	SER	A	8	47.000	20.455	122.869	1.00	23.56
	ATOM	19	C	SER	A	8	48.415	20.138	122.441	1.00	24.35
	ATOM	20	O	SER	A	8	49.373	20.412	123.160	1.00	26.74
	ATOM	21	CB	SER	A	8	46.622	21.879	122.430	1.00	31.02
	ATOM	22	OG	SER	A	8	46.685	22.047	121.018	1.00	33.65
25	ATOM	23	N	SER	A	9	48.543	19.566	121.256	1.00	19.45

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5	ATOM	24	CA	SER	A	9	49.837	19.201	120.716	1.00	16.68
	ATOM	25	C	SER	A	9	50.538	20.399	120.116	1.00	15.32
	ATOM	26	O	SER	A	9	51.678	20.290	119.657	1.00	25.03
	ATOM	27	CB	SER	A	9	49.655	18.124	119.662	1.00	20.38
	ATOM	28	OG	SER	A	9	48.488	18.395	118.902	1.00	44.06
10	ATOM	29	N	LEU	A	10	49.858	21.540	120.108	1.00	13.59
	ATOM	30	CA	LEU	A	10	50.434	22.758	119.559	1.00	9.55
	ATOM	31	C	LEU	A	10	50.544	23.811	120.636	1.00	15.50
	ATOM	32	O	LEU	A	10	49.646	23.962	121.471	1.00	25.23
	ATOM	33	CB	LEU	A	10	49.571	23.283	118.428	1.00	12.92
15	ATOM	34	CG	LEU	A	10	49.573	22.402	117.184	1.00	13.89
	ATOM	35	CD1	LEU	A	10	48.555	22.905	116.195	1.00	16.88
	ATOM	36	CD2	LEU	A	10	50.963	22.400	116.576	1.00	2.04
	ATOM	37	N	PRO	A	11	51.670	24.530	120.660	1.00	4.23
	ATOM	38	CA	PRO	A	11	51.928	25.584	121.633	1.00	4.92
20	ATOM	39	C	PRO	A	11	50.957	26.703	121.327	1.00	14.03
	ATOM	40	O	PRO	A	11	50.599	26.900	120.167	1.00	24.97
	ATOM	41	CB	PRO	A	11	53.343	26.038	121.279	1.00	3.09
	ATOM	42	CG	PRO	A	11	53.906	24.919	120.538	1.00	5.33
	ATOM	43	CD	PRO	A	11	52.779	24.431	119.710	1.00	5.00
25	ATOM	44	N	GLN	A	12	50.603	27.497	122.330	1.00	18.31
	ATOM	45	CA	GLN	A	12	49.685	28.596	122.088	1.00	7.39
	ATOM	46	C	GLN	A	12	50.375	29.782	121.406	1.00	10.42
	ATOM	47	O	GLN	A	12	49.754	30.434	120.578	1.00	23.97
	ATOM	48	CB	GLN	A	12	49.042	29.055	123.365	1.00	5.51

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5	ATOM	49	CG	GLN	A	12	47.997	30.069	123.142	1.00	18.59
	ATOM	50	CD	GLN	A	12	46.640	29.448	123.201	1.00	28.14
	ATOM	51	OE1	GLN	A	12	46.503	28.242	123.006	1.00	44.17
	ATOM	52	NE2	GLN	A	12	45.625	30.251	123.511	1.00	40.81
	ATOM	53	N	SER	A	13	51.641	30.063	121.723	1.00	6.40
10	ATOM	54	CA	SER	A	13	52.322	31.180	121.077	1.00	3.03
	ATOM	55	C	SER	A	13	52.330	30.958	119.560	1.00	8.16
	ATOM	56	O	SER	A	13	52.097	31.876	118.780	1.00	14.00
	ATOM	57	CB	SER	A	13	53.747	31.341	121.606	1.00	5.17
	ATOM	58	OG	SER	A	13	54.544	30.193	121.342	1.00	27.64
15	ATOM	59	N	PHE	A	14	52.558	29.722	119.150	1.00	5.23
	ATOM	60	CA	PHE	A	14	52.604	29.395	117.749	1.00	2.00
	ATOM	61	C	PHE	A	14	51.252	29.638	117.110	1.00	2.00
	ATOM	62	O	PHE	A	14	51.154	30.308	116.097	1.00	20.77
	ATOM	63	CB	PHE	A	14	53.009	27.956	117.591	1.00	4.64
20	ATOM	64	CG	PHE	A	14	52.732	27.402	116.234	1.00	18.63
	ATOM	65	CD1	PHE	A	14	53.495	27.798	115.138	1.00	17.96
	ATOM	66	CD2	PHE	A	14	51.690	26.494	116.041	1.00	7.70
	ATOM	67	CE1	PHE	A	14	53.220	27.298	113.870	1.00	2.00
	ATOM	68	CE2	PHE	A	14	51.412	25.993	114.779	1.00	2.00
25	ATOM	69	CZ	PHE	A	14	52.178	26.398	113.691	1.00	2.00
	ATOM	70	N	LEU	A	15	50.201	29.093	117.693	1.00	2.00
	ATOM	71	CA	LEU	A	15	48.857	29.308	117.167	1.00	2.00
	ATOM	72	C	LEU	A	15	48.435	30.766	117.066	1.00	6.79
	ATOM	73	O	LEU	A	15	47.645	31.111	116.202	1.00	10.90

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5	ATOM	74	CB	LEU	A	15	47.833	28.615	118.033	1.00	2.00
	ATOM	75	CG	LEU	A	15	47.738	27.103	117.968	1.00	13.48
	ATOM	76	CD1	LEU	A	15	46.635	26.664	118.904	1.00	16.85
	ATOM	77	CD2	LEU	A	15	47.433	26.671	116.540	1.00	4.76
	ATOM	78	N	LEU	A	16	48.863	31.609	117.997	1.00	7.93
10	ATOM	79	CA	LEU	A	16	48.497	33.014	117.928	1.00	2.00
	ATOM	80	C	LEU	A	16	49.269	33.698	116.813	1.00	2.00
	ATOM	81	O	LEU	A	16	48.746	34.589	116.175	1.00	14.40
	ATOM	82	CB	LEU	A	16	48.717	33.727	119.266	1.00	2.00
	ATOM	83	CG	LEU	A	16	47.845	33.264	120.433	1.00	2.00
15	ATOM	84	CD1	LEU	A	16	48.102	34.098	121.620	1.00	2.00
	ATOM	85	CD2	LEU	A	16	46.403	33.357	120.084	1.00	2.00
	ATOM	86	N	LYS	A	17	50.512	33.302	116.580	1.00	2.00
	ATOM	87	CA	LYS	A	17	51.301	33.879	115.498	1.00	2.00
	ATOM	88	C	LYS	A	17	50.679	33.445	114.184	1.00	2.05
20	ATOM	89	O	LYS	A	17	50.614	34.220	113.254	1.00	7.75
	ATOM	90	CB	LYS	A	17	52.734	33.386	115.543	1.00	2.00
	ATOM	91	CG	LYS	A	17	53.501	33.854	116.746	1.00	5.66
	ATOM	92	CD	LYS	A	17	54.949	33.433	116.664	1.00	12.18
	ATOM	93	CE	LYS	A	17	55.803	34.027	117.782	1.00	3.91
25	ATOM	94	NZ	LYS	A	17	57.203	33.482	117.834	1.00	29.52
	ATOM	95	N	CYS	A	18	50.204	32.203	114.099	1.00	9.92
	ATOM	96	CA	CYS	A	18	49.551	31.732	112.872	1.00	2.00
	ATOM	97	C	CYS	A	18	48.329	32.597	112.584	1.00	2.00
	ATOM	98	O	CYS	A	18	48.148	33.078	111.474	1.00	8.70

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5	ATOM	99	CB	CYS	A	18	49.135	30.264	112.962	1.00	2.00
	ATOM	100	SG	CYS	A	18	50.445	29.103	112.805	1.00	16.63
	ATOM	101	N	LEU	A	19	47.535	32.870	113.607	1.00	2.22
	ATOM	102	CA	LEU	A	19	46.339	33.691	113.440	1.00	2.28
	ATOM	103	C	LEU	A	19	46.668	35.110	113.015	1.00	6.32
10	ATOM	104	O	LEU	A	19	45.875	35.785	112.363	1.00	17.02
	ATOM	105	CB	LEU	A	19	45.546	33.732	114.727	1.00	2.00
	ATOM	106	CG	LEU	A	19	44.848	32.451	115.127	1.00	2.00
	ATOM	107	CD1	LEU	A	19	44.379	32.607	116.516	1.00	5.37
	ATOM	108	CD2	LEU	A	19	43.693	32.170	114.208	1.00	12.41
15	ATOM	109	N	GLU	A	20	47.839	35.575	113.394	1.00	3.14
	ATOM	110	CA	GLU	A	20	48.235	36.916	113.032	1.00	2.00
	ATOM	111	C	GLU	A	20	48.731	36.930	111.599	1.00	11.32
	ATOM	112	O	GLU	A	20	48.558	37.908	110.887	1.00	17.00
	ATOM	113	CB	GLU	A	20	49.309	37.389	113.988	1.00	2.00
20	ATOM	114	CG	GLU	A	20	49.676	38.791	113.798	1.00	2.00
	ATOM	115	CD	GLU	A	20	50.630	39.244	114.853	1.00	13.13
	ATOM	116	OE1	GLU	A	20	50.238	39.464	115.984	1.00	8.48
	ATOM	117	OE2	GLU	A	20	51.810	39.372	114.592	1.00	2.00
	ATOM	118	N	GLN	A	21	49.373	35.844	111.182	1.00	8.92
25	ATOM	119	CA	GLN	A	21	49.859	35.748	109.827	1.00	2.00
	ATOM	120	C	GLN	A	21	48.650	35.632	108.924	1.00	2.00
	ATOM	121	O	GLN	A	21	48.593	36.267	107.882	1.00	8.11
	ATOM	122	CB	GLN	A	21	50.778	34.561	109.677	1.00	2.00
	ATOM	123	CG	GLN	A	21	52.120	34.811	110.278	1.00	5.85

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5	ATOM	124	CD	GLN	A	21	53.164	33.786	109.902	1.00	11.84
	ATOM	125	OE1	GLN	A	21	53.356	32.790	110.608	1.00	7.38
	ATOM	126	NE2	GLN	A	21	53.876	34.036	108.809	1.00	15.03
	ATOM	127	N	VAL	A	22	47.639	34.895	109.361	1.00	2.00
	ATOM	128	CA	VAL	A	22	46.446	34.789	108.549	1.00	2.00
10	ATOM	129	C	VAL	A	22	45.851	36.169	108.329	1.00	5.97
	ATOM	130	O	VAL	A	22	45.522	36.532	107.216	1.00	23.03
	ATOM	131	CB	VAL	A	22	45.404	33.844	109.136	1.00	2.00
	ATOM	132	CG1	VAL	A	22	44.074	34.082	108.500	1.00	2.00
	ATOM	133	CG2	VAL	A	22	45.832	32.415	108.887	1.00	2.00
15	ATOM	134	N	ARG	A	23	45.740	36.975	109.365	1.00	8.79
	ATOM	135	CA	ARG	A	23	45.173	38.305	109.175	1.00	2.00
	ATOM	136	C	ARG	A	23	46.008	39.213	108.311	1.00	7.44
	ATOM	137	O	ARG	A	23	45.460	40.020	107.565	1.00	19.96
	ATOM	138	CB	ARG	A	23	44.990	39.024	110.483	1.00	2.20
20	ATOM	139	CG	ARG	A	23	43.807	38.608	111.257	1.00	14.68
	ATOM	140	CD	ARG	A	23	43.804	39.370	112.563	1.00	15.70
	ATOM	141	NE	ARG	A	23	43.467	38.429	113.614	1.00	37.32
	ATOM	142	CZ	ARG	A	23	44.240	38.167	114.652	1.00	20.72
	ATOM	143	NH1	ARG	A	23	45.398	38.803	114.792	1.00	2.00
25	ATOM	144	NH2	ARG	A	23	43.873	37.219	115.501	1.00	22.91
	ATOM	145	N	LYS	A	24	47.325	39.141	108.467	1.00	7.44
	ATOM	146	CA	LYS	A	24	48.252	39.967	107.705	1.00	2.00
	ATOM	147	C	LYS	A	24	48.085	39.665	106.217	1.00	4.50
	ATOM	148	O	LYS	A	24	47.879	40.577	105.408	1.00	2.37

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	ATOM	149	CB	LYS	A	24	49.674	39.681	108.190	1.00	2.00
	ATOM	150	CG	LYS	A	24	50.765	40.494	107.571	1.00	3.27
	ATOM	151	CD	LYS	A	24	52.109	40.059	108.134	1.00	16.83
	ATOM	152	CE	LYS	A	24	53.262	40.899	107.586	1.00	31.71
5	ATOM	153	NZ	LYS	A	24	53.033	42.376	107.692	1.00	62.96
	ATOM	154	N	ILE	A	25	48.103	38.378	105.874	1.00	2.00
	ATOM	155	CA	ILE	A	25	47.929	37.937	104.501	1.00	2.00
	ATOM	156	C	ILE	A	25	46.532	38.302	104.008	1.00	4.09
	ATOM	157	O	ILE	A	25	46.368	38.688	102.877	1.00	17.62
10	ATOM	158	CB	ILE	A	25	48.143	36.438	104.384	1.00	2.00
	ATOM	159	CG1	ILE	A	25	49.588	36.112	104.704	1.00	2.00
	ATOM	160	CG2	ILE	A	25	47.801	35.951	103.000	1.00	2.00
	ATOM	161	CD1	ILE	A	25	49.831	34.663	104.981	1.00	2.00
	ATOM	162	N	GLN	A	26	45.514	38.167	104.845	1.00	8.91
15	ATOM	163	CA	GLN	A	26	44.158	38.525	104.442	1.00	2.00
	ATOM	164	C	GLN	A	26	44.106	39.993	104.106	1.00	2.00
	ATOM	165	O	GLN	A	26	43.253	40.434	103.376	1.00	17.66
	ATOM	166	CB	GLN	A	26	43.177	38.305	105.567	1.00	2.00
	ATOM	167	CG	GLN	A	26	42.840	36.913	105.840	1.00	3.33
20	ATOM	168	CD	GLN	A	26	41.854	36.822	106.961	1.00	16.82
	ATOM	169	OE1	GLN	A	26	40.807	36.206	106.822	1.00	18.45
	ATOM	170	NE2	GLN	A	26	42.163	37.461	108.077	1.00	19.32
	ATOM	171	N	GLY	A	27	44.963	40.769	104.732	1.00	4.78
	ATOM	172	CA	GLY	A	27	44.981	42.181	104.461	1.00	2.00
25	ATOM	173	C	GLY	A	27	45.795	42.445	103.220	1.00	6.03

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	ATOM	174	O	GLY	A	27	45.575	43.440	102.546	1.00	14.60
	ATOM	175	N	ASP	A	28	46.760	41.581	102.932	1.00	10.64
	ATOM	176	CA	ASP	A	28	47.578	41.748	101.732	1.00	10.89
	ATOM	177	C	ASP	A	28	46.744	41.417	100.484	1.00	7.36
5	ATOM	178	O	ASP	A	28	46.784	42.133	99.500	1.00	20.08
	ATOM	179	CB	ASP	A	28	48.835	40.845	101.760	1.00	14.07
	ATOM	180	CG	ASP	A	28	49.852	41.249	102.826	1.00	16.51
	ATOM	181	OD1	ASP	A	28	49.823	42.408	103.288	1.00	42.78
	ATOM	182	OD2	ASP	A	28	50.703	40.411	103.194	1.00	8.82
10	ATOM	183	N	GLY	A	29	45.988	40.332	100.527	1.00	6.18
	ATOM	184	CA	GLY	A	29	45.174	39.951	99.392	1.00	2.00
	ATOM	185	C	GLY	A	29	44.106	40.990	99.125	1.00	3.89
	ATOM	186	O	GLY	A	29	43.721	41.208	97.983	1.00	13.54
	ATOM	187	N	ALA	A	30	43.609	41.625	100.182	1.00	7.47
15	ATOM	188	CA	ALA	A	30	42.591	42.657	100.047	1.00	5.49
	ATOM	189	C	ALA	A	30	43.174	43.827	99.273	1.00	7.85
	ATOM	190	O	ALA	A	30	42.509	44.402	98.414	1.00	29.54
	ATOM	191	CB	ALA	A	30	42.125	43.109	101.386	1.00	2.00
	ATOM	192	N	ALA	A	31	44.414	44.178	99.587	1.00	12.61
20	ATOM	193	CA	ALA	A	31	45.108	45.262	98.901	1.00	14.83
	ATOM	194	C	ALA	A	31	45.260	44.908	97.420	1.00	17.18
	ATOM	195	O	ALA	A	31	44.995	45.732	96.549	1.00	20.51
	ATOM	196	CB	ALA	A	31	46.465	45.487	99.519	1.00	2.00
	ATOM	197	N	LEU	A	32	45.678	43.674	97.146	1.00	19.42
25	ATOM	198	CA	LEU	A	32	45.844	43.189	95.781	1.00	3.57

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5	ATOM	199	C	LEU	A	32	44.498	43.263	95.056	1.00	17.23
	ATOM	200	O	LEU	A	32	44.395	43.859	93.998	1.00	16.07
	ATOM	201	CB	LEU	A	32	46.356	41.764	95.796	1.00	2.00
	ATOM	202	CG	LEU	A	32	46.411	41.079	94.441	1.00	2.38
	ATOM	203	CD1	LEU	A	32	47.283	41.871	93.559	1.00	2.00
10	ATOM	204	CD2	LEU	A	32	46.916	39.647	94.532	1.00	2.00
	ATOM	205	N	GLN	A	33	43.454	42.717	95.661	1.00	14.17
	ATOM	206	CA	GLN	A	33	42.148	42.757	95.054	1.00	5.26
	ATOM	207	C	GLN	A	33	41.635	44.170	94.842	1.00	4.24
	ATOM	208	O	GLN	A	33	40.891	44.441	93.907	1.00	22.71
15	ATOM	209	CB	GLN	A	33	41.181	41.947	95.875	1.00	2.00
	ATOM	210	CG	GLN	A	33	41.299	40.471	95.613	1.00	11.29
	ATOM	211	CD	GLN	A	33	40.517	39.661	96.617	1.00	27.32
	ATOM	212	OE1	GLN	A	33	39.824	38.703	96.269	1.00	54.16
	ATOM	213	NE2	GLN	A	33	40.621	40.042	97.877	1.00	19.76
20	ATOM	214	N	GLU	A	34	42.043	45.082	95.693	1.00	6.32
	ATOM	215	CA	GLU	A	34	41.620	46.453	95.533	1.00	11.86
	ATOM	216	C	GLU	A	34	42.364	47.005	94.332	1.00	14.61
	ATOM	217	O	GLU	A	34	41.770	47.567	93.420	1.00	23.83
	ATOM	218	CB	GLU	A	34	41.977	47.276	96.753	1.00	18.27
25	ATOM	219	CG	GLU	A	34	41.130	48.525	96.916	1.00	59.53
	ATOM	220	CD	GLU	A	34	41.219	49.484	95.729	1.00	79.47
	ATOM	221	OE1	GLU	A	34	42.332	49.983	95.451	1.00	82.63
	ATOM	222	OE2	GLU	A	34	40.176	49.737	95.079	1.00	86.29
	ATOM	223	N	LYS	A	35	43.667	46.818	94.309	1.00	5.50

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5	ATOM	224	CA	LYS	A	35	44.458	47.310	93.197	1.00	8.29
	ATOM	225	C	LYS	A	35	43.912	46.826	91.833	1.00	18.82
	ATOM	226	O	LYS	A	35	43.666	47.632	90.942	1.00	21.49
	ATOM	227	CB	LYS	A	35	45.903	46.867	93.371	1.00	11.50
	ATOM	228	CG	LYS	A	35	46.914	47.649	92.575	1.00	27.07
10	ATOM	229	CD	LYS	A	35	47.132	49.047	93.140	1.00	41.60
	ATOM	230	CE	LYS	A	35	48.180	49.802	92.322	1.00	51.41
	ATOM	231	NZ	LYS	A	35	48.353	51.231	92.720	1.00	67.30
	ATOM	232	N	LEU	A	36	43.700	45.521	91.684	1.00	17.04
	ATOM	233	CA	LEU	A	36	43.181	44.950	90.447	1.00	2.00
15	ATOM	234	C	LEU	A	36	41.840	45.565	90.080	1.00	7.30
	ATOM	235	O	LEU	A	36	41.539	45.755	88.908	1.00	27.03
	ATOM	236	CB	LEU	A	36	43.005	43.445	90.582	1.00	2.00
	ATOM	237	CG	LEU	A	36	44.268	42.605	90.665	1.00	2.00
	ATOM	238	CD1	LEU	A	36	43.969	41.292	91.277	1.00	7.99
20	ATOM	239	CD2	LEU	A	36	44.815	42.390	89.325	1.00	2.00
	ATOM	240	N	CYS	A	37	41.008	45.854	91.061	1.00	3.69
	ATOM	241	CA	CYS	A	37	39.743	46.459	90.729	1.00	13.52
	ATOM	242	C	CYS	A	37	39.916	47.929	90.370	1.00	11.90
	ATOM	243	O	CYS	A	37	39.259	48.432	89.482	1.00	25.18
25	ATOM	244	CB	CYS	A	37	38.741	46.292	91.860	1.00	5.69
	ATOM	245	SG	CYS	A	37	37.206	47.274	91.689	1.00	48.92
	ATOM	246	N	ALA	A	38	40.855	48.605	90.997	1.00	16.45
	ATOM	247	CA	ALA	A	38	41.053	50.018	90.711	1.00	22.15
	ATOM	248	C	ALA	A	38	41.743	50.234	89.383	1.00	28.29

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5	ATOM	249	O	ALA	A	38	41.367	51.080	88.568	1.00	42.34
	ATOM	250	CB	ALA	A	38	41.875	50.645	91.802	1.00	26.96
	ATOM	251	N	THR	A	39	42.781	49.459	89.186	1.00	24.09
	ATOM	252	CA	THR	A	39	43.599	49.548	88.010	1.00	19.84
	ATOM	253	C	THR	A	39	43.006	48.922	86.745	1.00	20.80
10	ATOM	254	O	THR	A	39	43.226	49.428	85.654	1.00	39.12
	ATOM	255	CB	THR	A	39	44.960	48.918	88.350	1.00	24.38
	ATOM	256	OG1	THR	A	39	45.398	49.425	89.618	1.00	31.36
	ATOM	257	CG2	THR	A	39	46.006	49.236	87.296	1.00	26.80
	ATOM	258	N	TYR	A	40	42.220	47.865	86.888	1.00	9.34
15	ATOM	259	CA	TYR	A	40	41.674	47.177	85.737	1.00	6.17
	ATOM	260	C	TYR	A	40	40.190	46.889	85.826	1.00	17.01
	ATOM	261	O	TYR	A	40	39.704	45.968	85.178	1.00	21.76
	ATOM	262	CB	TYR	A	40	42.367	45.833	85.580	1.00	2.00
	ATOM	263	CG	TYR	A	40	43.851	45.930	85.471	1.00	13.86
20	ATOM	264	CD1	TYR	A	40	44.442	46.850	84.624	1.00	17.74
	ATOM	265	CD2	TYR	A	40	44.669	45.099	86.208	1.00	9.73
	ATOM	266	CE1	TYR	A	40	45.823	46.948	84.515	1.00	32.96
	ATOM	267	CE2	TYR	A	40	46.052	45.184	86.113	1.00	21.23
	ATOM	268	CZ	TYR	A	40	46.630	46.120	85.265	1.00	28.30
25	ATOM	269	OH	TYR	A	40	48.006	46.289	85.196	1.00	29.15
	ATOM	270	N	LYS	A	41	39.469	47.637	86.644	1.00	19.52
	ATOM	271	CA	LYS	A	41	38.036	47.421	86.817	1.00	13.69
	ATOM	272	C	LYS	A	41	37.566	45.960	86.786	1.00	8.72
	ATOM	273	O	LYS	A	41	36.448	45.658	86.373	1.00	20.52

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5	ATOM	274	CB	LYS	A	41	37.231	48.312	85.880	1.00	16.90
	ATOM	275	CG	LYS	A	41	37.357	49.802	86.207	1.00	38.99
	ATOM	276	CD	LYS	A	41	35.986	50.481	86.245	1.00	61.97
	ATOM	277	CE	LYS	A	41	35.074	49.849	87.304	1.00	73.98
	ATOM	278	NZ	LYS	A	41	33.673	50.381	87.273	1.00	90.30
10	ATOM	279	N	LEU	A	42	38.442	45.068	87.248	1.00	15.38
	ATOM	280	CA	LEU	A	42	38.192	43.619	87.387	1.00	19.38
	ATOM	281	C	LEU	A	42	37.804	43.466	88.872	1.00	20.54
	ATOM	282	O	LEU	A	42	38.618	43.102	89.704	1.00	27.27
	ATOM	283	CB	LEU	A	42	39.489	42.858	87.125	1.00	6.50
15	ATOM	284	CG	LEU	A	42	39.819	42.375	85.725	1.00	17.34
	ATOM	285	CD1	LEU	A	42	41.279	42.027	85.626	1.00	25.39
	ATOM	286	CD2	LEU	A	42	38.971	41.164	85.442	1.00	21.04
	ATOM	287	N	CYS	A	43	36.548	43.715	89.195	1.00	15.38
	ATOM	288	CA	CYS	A	43	36.143	43.721	90.581	1.00	13.29
20	ATOM	289	C	CYS	A	43	35.354	42.579	91.184	1.00	26.70
	ATOM	290	O	CYS	A	43	35.243	42.497	92.400	1.00	43.57
	ATOM	291	CB	CYS	A	43	35.366	45.006	90.831	1.00	16.45
	ATOM	292	SG	CYS	A	43	36.166	46.468	90.127	1.00	46.16
	ATOM	293	N	HIS	A	44	34.789	41.708	90.365	1.00	31.16
25	ATOM	294	CA	HIS	A	44	33.955	40.638	90.903	1.00	25.40
	ATOM	295	C	HIS	A	44	34.453	39.279	90.436	1.00	24.70
	ATOM	296	O	HIS	A	44	34.165	38.860	89.318	1.00	33.30
	ATOM	297	CB	HIS	A	44	32.478	40.836	90.464	1.00	28.77
	ATOM	298	CG	HIS	A	44	32.008	42.269	90.466	1.00	46.08

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	ATOM	299	ND1	HIS	A	44	32.585	43.252	89.686	1.00	63.77
	ATOM	300	CD2	HIS	A	44	30.995	42.873	91.133	1.00	48.07
	ATOM	301	CE1	HIS	A	44	31.951	44.397	89.874	1.00	62.21
	ATOM	302	NE2	HIS	A	44	30.982	44.194	90.747	1.00	58.50
5	ATOM	303	N	PRO	A	45	35.164	38.545	91.301	1.00	20.62
	ATOM	304	CA	PRO	A	45	35.694	37.220	90.950	1.00	17.21
	ATOM	305	C	PRO	A	45	34.668	36.258	90.405	1.00	17.94
	ATOM	306	O	PRO	A	45	34.999	35.378	89.626	1.00	17.47
	ATOM	307	CB	PRO	A	45	36.265	36.706	92.277	1.00	15.61
10	ATOM	308	CG	PRO	A	45	35.534	37.463	93.304	1.00	21.64
	ATOM	309	CD	PRO	A	45	35.456	38.855	92.704	1.00	19.87
	ATOM	310	N	GLU	A	46	33.423	36.422	90.838	1.00	29.35
	ATOM	311	CA	GLU	A	46	32.321	35.566	90.415	1.00	36.06
	ATOM	312	C	GLU	A	46	32.235	35.564	88.906	1.00	38.35
15	ATOM	313	O	GLU	A	46	32.067	34.523	88.277	1.00	39.50
	ATOM	314	CB	GLU	A	46	31.007	36.074	90.994	1.00	49.95
	ATOM	315	CG	GLU	A	46	30.913	36.001	92.522	1.00	92.51
	ATOM	316	CD	GLU	A	46	31.906	36.913	93.249	1.00	106.11
	ATOM	317	OE1	GLU	A	46	31.993	38.118	92.899	1.00	109.39
20	ATOM	318	OE2	GLU	A	46	32.594	36.413	94.174	1.00	115.01
	ATOM	319	N	GLU	A	47	32.410	36.743	88.328	1.00	33.59
	ATOM	320	CA	GLU	A	47	32.358	36.903	86.891	1.00	19.05
	ATOM	321	C	GLU	A	47	33.416	36.043	86.231	1.00	18.53
	ATOM	322	O	GLU	A	47	33.218	35.552	85.142	1.00	30.04
25	ATOM	323	CB	GLU	A	47	32.541	38.384	86.512	1.00	5.80

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	ATOM	324	CG	GLU	A	47	31.470	39.287	87.133	1.00	27.98
	ATOM	325	CD	GLU	A	47	31.614	40.777	86.811	1.00	37.90
	ATOM	326	OE1	GLU	A	47	32.728	41.261	86.486	1.00	34.28
	ATOM	327	OE2	GLU	A	47	30.586	41.477	86.925	1.00	43.15
5	ATOM	328	N	LEU	A	48	34.518	35.797	86.919	1.00	28.75
	ATOM	329	CA	LEU	A	48	35.607	35.027	86.341	1.00	21.13
	ATOM	330	C	LEU	A	48	35.562	33.558	86.686	1.00	20.94
	ATOM	331	O	LEU	A	48	36.396	32.766	86.229	1.00	18.06
	ATOM	332	CB	LEU	A	48	36.931	35.627	86.799	1.00	17.33
10	ATOM	333	CG	LEU	A	48	37.072	37.062	86.311	1.00	11.53
	ATOM	334	CD1	LEU	A	48	38.391	37.683	86.745	1.00	14.76
	ATOM	335	CD2	LEU	A	48	36.959	37.018	84.807	1.00	2.00
	ATOM	336	N	VAL	A	49	34.568	33.183	87.472	1.00	25.83
	ATOM	337	CA	VAL	A	49	34.432	31.799	87.910	1.00	35.17
15	ATOM	338	C	VAL	A	49	34.852	30.712	86.912	1.00	26.48
	ATOM	339	O	VAL	A	49	35.731	29.906	87.199	1.00	32.51
	ATOM	340	CB	VAL	A	49	33.013	31.531	88.450	1.00	46.86
	ATOM	341	CG1	VAL	A	49	32.695	30.034	88.421	1.00	41.99
	ATOM	342	CG2	VAL	A	49	32.905	32.081	89.887	1.00	57.06
20	ATOM	343	N	LEU	A	50	34.263	30.705	85.731	1.00	30.16
	ATOM	344	CA	LEU	A	50	34.598	29.687	84.734	1.00	28.74
	ATOM	345	C	LEU	A	50	36.053	29.587	84.296	1.00	36.05
	ATOM	346	O	LEU	A	50	36.475	28.532	83.829	1.00	29.59
	ATOM	347	CB	LEU	A	50	33.743	29.838	83.480	1.00	32.92
25	ATOM	348	CG	LEU	A	50	32.268	29.477	83.604	1.00	39.47

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5	ATOM	349	CD1	LEU	A	50	31.599	29.592	82.249	1.00	35.23
	ATOM	350	CD2	LEU	A	50	32.138	28.072	84.123	1.00	28.10
	ATOM	351	N	LEU	A	51	36.827	30.663	84.424	1.00	38.15
	ATOM	352	CA	LEU	A	51	38.221	30.612	83.993	1.00	31.85
	ATOM	353	C	LEU	A	51	39.126	29.804	84.913	1.00	28.13
10	ATOM	354	O	LEU	A	51	40.254	29.476	84.552	1.00	28.88
	ATOM	355	CB	LEU	A	51	38.770	32.012	83.732	1.00	39.15
	ATOM	356	CG	LEU	A	51	38.558	32.594	82.318	1.00	44.14
	ATOM	357	CD1	LEU	A	51	37.139	32.379	81.804	1.00	51.53
	ATOM	358	CD2	LEU	A	51	38.872	34.077	82.336	1.00	48.78
15	ATOM	359	N	GLY	A	52	38.606	29.426	86.076	1.00	23.23
	ATOM	360	CA	GLY	A	52	39.380	28.629	87.008	1.00	15.54
	ATOM	361	C	GLY	A	52	39.655	27.257	86.425	1.00	31.04
	ATOM	362	O	GLY	A	52	40.760	26.722	86.548	1.00	40.58
	ATOM	363	N	HIS	A	53	38.634	26.667	85.810	1.00	25.79
20	ATOM	364	CA	HIS	A	53	38.788	25.358	85.211	1.00	17.29
	ATOM	365	C	HIS	A	53	39.614	25.554	83.947	1.00	23.31
	ATOM	366	O	HIS	A	53	40.591	24.856	83.719	1.00	28.12
	ATOM	367	CB	HIS	A	53	37.426	24.759	84.867	1.00	14.91
	ATOM	368	CG	HIS	A	53	36.637	24.299	86.052	1.00	21.66
25	ATOM	369	ND1	HIS	A	53	35.547	24.989	86.538	1.00	39.51
	ATOM	370	CD2	HIS	A	53	36.786	23.222	86.861	1.00	46.93
	ATOM	371	CE1	HIS	A	53	35.065	24.365	87.600	1.00	42.29
	ATOM	372	NE2	HIS	A	53	35.799	23.289	87.817	1.00	53.46
	ATOM	373	N	SER	A	54	39.252	26.564	83.166	1.00	28.83

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	ATOM	374	CA	SER	A	54	39.928	26.869	81.910	1.00	31.06
	ATOM	375	C	SER	A	54	41.426	27.090	82.083	1.00	38.63
	ATOM	376	O	SER	A	54	42.221	26.650	81.254	1.00	53.06
	ATOM	377	CB	SER	A	54	39.285	28.107	81.267	1.00	31.64
5	ATOM	378	OG	SER	A	54	39.910	28.496	80.049	1.00	53.46
	ATOM	379	N	LEU	A	55	41.813	27.764	83.161	1.00	38.86
	ATOM	380	CA	LEU	A	55	43.218	28.061	83.404	1.00	31.47
	ATOM	381	C	LEU	A	55	43.897	27.032	84.247	1.00	32.20
	ATOM	382	O	LEU	A	55	45.126	26.972	84.277	1.00	31.05
10	ATOM	383	CB	LEU	A	55	43.365	29.422	84.041	1.00	19.96
	ATOM	384	CG	LEU	A	55	42.944	30.496	83.057	1.00	13.59
	ATOM	385	CD1	LEU	A	55	42.867	31.813	83.749	1.00	5.95
	ATOM	386	CD2	LEU	A	55	43.931	30.543	81.926	1.00	16.66
	ATOM	387	N	GLY	A	56	43.085	26.243	84.942	1.00	27.91
15	ATOM	388	CA	GLY	A	56	43.599	25.182	85.779	1.00	28.44
	ATOM	389	C	GLY	A	56	43.994	25.615	87.162	1.00	34.24
	ATOM	390	O	GLY	A	56	44.847	24.990	87.779	1.00	45.42
	ATOM	391	N	ILE	A	57	43.373	26.680	87.649	1.00	30.04
	ATOM	392	CA	ILE	A	57	43.658	27.191	88.981	1.00	25.34
20	ATOM	393	C	ILE	A	57	43.349	26.125	90.007	1.00	35.35
	ATOM	394	O	ILE	A	57	42.177	25.785	90.219	1.00	42.20
	ATOM	395	CB	ILE	A	57	42.795	28.420	89.315	1.00	16.42
	ATOM	396	CG1	ILE	A	57	43.420	29.660	88.721	1.00	18.49
	ATOM	397	CG2	ILE	A	57	42.681	28.615	90.810	1.00	10.15
25	ATOM	398	CD1	ILE	A	57	43.855	29.467	87.298	1.00	42.53

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5	ATOM	399	N	PRO	A	58	44.391	25.565	90.643	1.00	37.39
	ATOM	400	CA	PRO	A	58	44.185	24.531	91.661	1.00	43.95
	ATOM	401	C	PRO	A	58	43.362	25.000	92.884	1.00	48.88
	ATOM	402	O	PRO	A	58	43.137	26.198	93.118	1.00	52.13
	ATOM	403	CB	PRO	A	58	45.620	24.129	92.043	1.00	35.39
10	ATOM	404	CG	PRO	A	58	46.398	24.384	90.786	1.00	36.96
	ATOM	405	CD	PRO	A	58	45.824	25.711	90.328	1.00	33.46
	ATOM	406	N	TRP	A	59	42.866	24.026	93.629	1.00	56.58
	ATOM	407	CA	TRP	A	59	42.089	24.297	94.814	1.00	61.02
	ATOM	408	C	TRP	A	59	42.852	23.585	95.940	1.00	56.39
15	ATOM	409	O	TRP	A	59	43.514	22.562	95.710	1.00	53.30
	ATOM	410	CB	TRP	A	59	40.639	23.779	94.619	1.00	76.54
	ATOM	411	CG	TRP	A	59	40.194	22.653	95.535	1.00	88.89
	ATOM	412	CD1	TRP	A	59	39.278	22.737	96.552	1.00	92.13
	ATOM	413	CD2	TRP	A	59	40.703	21.306	95.566	1.00	93.14
20	ATOM	414	NE1	TRP	A	59	39.201	21.535	97.222	1.00	95.62
	ATOM	415	CE2	TRP	A	59	40.065	20.642	96.642	1.00	96.11
	ATOM	416	CE3	TRP	A	59	41.642	20.602	94.796	1.00	90.05
	ATOM	417	CZ2	TRP	A	59	40.342	19.305	96.970	1.00	91.47
	ATOM	418	CZ3	TRP	A	59	41.917	19.274	95.120	1.00	91.44
25	ATOM	419	CH2	TRP	A	59	41.268	18.641	96.202	1.00	89.89
	ATOM	420	N	ALA	A	60	42.870	24.204	97.115	1.00	48.35
	ATOM	421	CA	ALA	A	60	43.532	23.628	98.275	1.00	22.16
	ATOM	422	C	ALA	A	60	42.436	23.307	99.278	1.00	21.99
	ATOM	423	O	ALA	A	60	41.688	24.187	99.725	1.00	22.31

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5	ATOM	424	CB	ALA	A	60	44.504	24.597	98.857	1.00	29.42
	ATOM	425	N	PRO	A	61	42.297	22.026	99.607	1.00	18.06
	ATOM	426	CA	PRO	A	61	41.315	21.469	100.540	1.00	21.43
	ATOM	427	C	PRO	A	61	41.728	21.607	102.009	1.00	24.57
	ATOM	428	O	PRO	A	61	42.900	21.820	102.302	1.00	39.23
10	ATOM	429	CB	PRO	A	61	41.323	20.003	100.149	1.00	14.13
	ATOM	430	CG	PRO	A	61	42.799	19.770	99.905	1.00	2.00
	ATOM	431	CD	PRO	A	61	43.189	20.974	99.083	1.00	7.49
	ATOM	432	N	LEU	A	62	40.779	21.446	102.928	1.00	29.07
	ATOM	433	CA	LEU	A	62	41.079	21.493	104.366	1.00	23.05
15	ATOM	434	C	LEU	A	62	40.263	20.439	105.131	1.00	29.09
	ATOM	435	O	LEU	A	62	40.020	20.564	106.333	1.00	41.91
	ATOM	436	CB	LEU	A	62	40.833	22.887	104.944	1.00	17.82
	ATOM	437	CG	LEU	A	62	41.843	23.998	104.630	1.00	12.17
	ATOM	438	CD1	LEU	A	62	41.177	25.315	104.821	1.00	27.81
20	ATOM	439	CD2	LEU	A	62	43.056	23.932	105.501	1.00	12.60
	ATOM	440	N	SER	A	63	39.926	19.364	104.424	1.00	36.76
	ATOM	441	CA	SER	A	63	39.140	18.236	104.920	1.00	41.52
	ATOM	442	C	SER	A	63	39.489	17.692	106.306	1.00	42.74
	ATOM	443	O	SER	A	63	38.615	17.168	107.025	1.00	44.38
25	ATOM	444	CB	SER	A	63	39.249	17.090	103.914	1.00	48.53
	ATOM	445	OG	SER	A	63	38.880	17.523	102.616	1.00	60.31
	ATOM	446	N	SER	A	64	40.741	17.872	106.706	1.00	31.30
	ATOM	447	CA	SER	A	64	41.197	17.340	107.969	1.00	26.18
	ATOM	448	C	SER	A	64	41.278	18.265	109.158	1.00	32.55

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	ATOM	449	O	SER	A	64	42.061	17.996	110.063	1.00	29.03
	ATOM	450	CB	SER	A	64	42.548	16.700	107.746	1.00	18.42
	ATOM	451	OG	SER	A	64	42.546	16.054	106.490	1.00	29.62
	ATOM	452	N	CYS	A	65	40.439	19.296	109.223	1.00	39.81
5	ATOM	453	CA	CYS	A	65	40.534	20.203	110.356	1.00	52.00
	ATOM	454	C	CYS	A	65	39.394	20.342	111.401	1.00	65.87
	ATOM	455	O	CYS	A	65	39.669	20.624	112.579	1.00	69.44
	ATOM	456	CB	CYS	A	65	41.107	21.548	109.887	1.00	45.07
	ATOM	457	SG	CYS	A	65	42.820	21.443	109.195	1.00	46.86
10	ATOM	458	N	PRO	A	66	38.119	20.097	111.018	1.00	73.86
	ATOM	459	CA	PRO	A	66	37.062	20.229	112.031	1.00	85.31
	ATOM	460	C	PRO	A	66	36.882	18.938	112.829	1.00	100.19
	ATOM	461	O	PRO	A	66	36.050	18.877	113.747	1.00	103.21
	ATOM	462	CB	PRO	A	66	35.824	20.498	111.183	1.00	77.88
15	ATOM	463	CG	PRO	A	66	36.063	19.612	110.009	1.00	77.01
	ATOM	464	CD	PRO	A	66	37.525	19.891	109.683	1.00	75.74
	ATOM	465	N	SER	A	67	37.683	17.925	112.487	1.00	113.37
	ATOM	466	CA	SER	A	67	37.600	16.608	113.115	1.00	123.55
	ATOM	467	C	SER	A	67	38.798	16.056	113.922	1.00	124.38
20	ATOM	468	O	SER	A	67	39.022	14.841	113.936	1.00	121.42
	ATOM	469	CB	SER	A	67	37.151	15.578	112.062	1.00	126.65
	ATOM	470	OG	SER	A	67	35.870	15.903	111.531	1.00	132.02
	ATOM	471	N	GLN	A	68	39.554	16.927	114.596	1.00	124.77
	ATOM	472	CA	GLN	A	68	40.682	16.489	115.436	1.00	123.01
25	ATOM	473	C	GLN	A	68	41.299	17.596	116.308	1.00	125.15

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5	ATOM	474	O	GLN	A	68	41.362	18.750	115.874	1.00	126.33
	ATOM	475	CB	GLN	A	68	41.745	15.768	114.611	1.00	113.67
	ATOM	476	CG	GLN	A	68	42.245	16.502	113.400	1.00	103.59
	ATOM	477	CD	GLN	A	68	43.068	15.580	112.509	1.00	103.06
	ATOM	478	OE1	GLN	A	68	44.280	15.767	112.334	1.00	95.94
10	ATOM	479	NE2	GLN	A	68	42.415	14.562	111.953	1.00	99.83
	ATOM	480	N	ALA	A	69	41.740	17.230	117.527	1.00	121.73
	ATOM	481	CA	ALA	A	69	42.317	18.175	118.520	1.00	112.59
	ATOM	482	C	ALA	A	69	43.745	17.944	119.073	1.00	104.91
	ATOM	483	O	ALA	A	69	44.554	18.876	119.128	1.00	92.14
15	ATOM	484	CB	ALA	A	69	41.344	18.343	119.691	1.00	112.55
	ATOM	485	N	LEU	A	70	44.021	16.746	119.584	1.00	103.67
	ATOM	486	CA	LEU	A	70	45.354	16.443	120.122	1.00	101.75
	ATOM	487	C	LEU	A	70	46.186	15.714	119.059	1.00	102.65
	ATOM	488	O	LEU	A	70	47.395	15.529	119.210	1.00	100.37
20	ATOM	489	CB	LEU	A	70	45.243	15.607	121.407	1.00	97.53
	ATOM	490	CG	LEU	A	70	46.383	15.616	122.441	1.00	89.44
	ATOM	491	CD1	LEU	A	70	45.831	15.207	123.804	1.00	83.07
	ATOM	492	CD2	LEU	A	70	47.531	14.700	122.029	1.00	86.74
	ATOM	493	N	GLN	A	71	45.512	15.304	117.987	1.00	104.84
25	ATOM	494	CA	GLN	A	71	46.127	14.623	116.845	1.00	100.42
	ATOM	495	C	GLN	A	71	45.804	15.531	115.653	1.00	95.55
	ATOM	496	O	GLN	A	71	44.677	15.512	115.151	1.00	95.79
	ATOM	497	CB	GLN	A	71	45.499	13.246	116.652	1.00	102.03
	ATOM	498	N	LEU	A	72	46.783	16.334	115.226	1.00	82.03

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	ATOM	499	CA	LEU	A	72	46.597	17.300	114.133	1.00	59.18
	ATOM	500	C	LEU	A	72	47.680	17.371	113.044	1.00	46.84
	ATOM	501	O	LEU	A	72	47.749	18.340	112.291	1.00	52.43
	ATOM	502	CB	LEU	A	72	46.365	18.693	114.733	1.00	41.15
5	ATOM	503	CG	LEU	A	72	47.151	18.983	116.011	1.00	26.44
	ATOM	504	CD1	LEU	A	72	48.613	19.169	115.717	1.00	39.87
	ATOM	505	CD2	LEU	A	72	46.590	20.183	116.701	1.00	33.76
	ATOM	506	N	ALA	A	73	48.497	16.331	112.945	1.00	37.83
	ATOM	507	CA	ALA	A	73	49.561	16.257	111.955	1.00	30.52
10	ATOM	508	C	ALA	A	73	48.994	16.470	110.556	1.00	36.09
	ATOM	509	O	ALA	A	73	49.587	17.147	109.716	1.00	41.76
	ATOM	510	CB	ALA	A	73	50.230	14.901	112.039	1.00	38.39
	ATOM	511	N	GLY	A	74	47.830	15.888	110.314	1.00	38.95
	ATOM	512	CA	GLY	A	74	47.201	16.023	109.018	1.00	34.46
15	ATOM	513	C	GLY	A	74	46.727	17.438	108.772	1.00	35.49
	ATOM	514	O	GLY	A	74	46.928	17.951	107.677	1.00	42.54
	ATOM	515	N	CYS	A	75	46.161	18.087	109.797	1.00	33.51
	ATOM	516	CA	CYS	A	75	45.640	19.455	109.668	1.00	19.50
	ATOM	517	C	CYS	A	75	46.736	20.469	109.342	1.00	27.18
20	ATOM	518	O	CYS	A	75	46.636	21.203	108.366	1.00	31.14
	ATOM	519	CB	CYS	A	75	44.858	19.856	110.912	1.00	14.47
	ATOM	520	SG	CYS	A	75	44.089	21.491	110.816	1.00	40.22
	ATOM	521	N	LEU	A	76	47.806	20.503	110.122	1.00	24.63
	ATOM	522	CA	LEU	A	76	48.878	21.409	109.790	1.00	18.22
25	ATOM	523	C	LEU	A	76	49.430	21.066	108.410	1.00	19.55

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5	ATOM	524	O	LEU	A	76	49.702	21.953	107.600	1.00	23.21
	ATOM	525	CB	LEU	A	76	49.975	21.310	110.806	1.00	15.77
	ATOM	526	CG	LEU	A	76	49.642	21.938	112.134	1.00	18.16
	ATOM	527	CD1	LEU	A	76	50.970	22.201	112.784	1.00	20.32
	ATOM	528	CD2	LEU	A	76	48.875	23.247	111.968	1.00	19.08
10	ATOM	529	N	SER	A	77	49.582	19.774	108.143	1.00	22.15
	ATOM	530	CA	SER	A	77	50.081	19.293	106.854	1.00	18.81
	ATOM	531	C	SER	A	77	49.317	19.903	105.668	1.00	17.77
	ATOM	532	O	SER	A	77	49.928	20.345	104.696	1.00	28.34
	ATOM	533	CB	SER	A	77	50.009	17.774	106.812	1.00	20.51
15	ATOM	534	OG	SER	A	77	50.610	17.270	105.638	1.00	58.20
	ATOM	535	N	GLN	A	78	47.991	19.981	105.773	1.00	19.99
	ATOM	536	CA	GLN	A	78	47.155	20.566	104.709	1.00	15.78
	ATOM	537	C	GLN	A	78	47.288	22.076	104.639	1.00	12.81
	ATOM	538	O	GLN	A	78	47.363	22.643	103.548	1.00	16.37
20	ATOM	539	CB	GLN	A	78	45.672	20.251	104.898	1.00	9.54
	ATOM	540	CG	GLN	A	78	45.303	18.808	104.730	1.00	26.91
	ATOM	541	CD	GLN	A	78	43.857	18.635	104.313	1.00	31.88
	ATOM	542	OE1	GLN	A	78	42.925	18.750	105.127	1.00	20.53
	ATOM	543	NE2	GLN	A	78	43.657	18.339	103.031	1.00	59.85
25	ATOM	544	N	LEU	A	79	47.266	22.722	105.802	1.00	3.72
	ATOM	545	CA	LEU	A	79	47.408	24.151	105.878	1.00	2.00
	ATOM	546	C	LEU	A	79	48.667	24.460	105.117	1.00	2.00
	ATOM	547	O	LEU	A	79	48.671	25.293	104.221	1.00	25.66
	ATOM	548	CB	LEU	A	79	47.560	24.595	107.320	1.00	2.76

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	ATOM	549	CG	LEU	A	79	46.622	25.692	107.837	1.00	21.27
	ATOM	550	CD1	LEU	A	79	47.009	25.960	109.269	1.00	37.50
	ATOM	551	CD2	LEU	A	79	46.717	27.007	107.034	1.00	26.17
	ATOM	552	N	HIS	A	80	49.725	23.725	105.394	1.00	2.00
5	ATOM	553	CA	HIS	A	80	50.956	23.974	104.681	1.00	2.80
	ATOM	554	C	HIS	A	80	50.851	23.739	103.198	1.00	12.79
	ATOM	555	O	HIS	A	80	51.308	24.576	102.429	1.00	25.47
	ATOM	556	CB	HIS	A	80	52.108	23.139	105.213	1.00	4.57
	ATOM	557	CG	HIS	A	80	53.346	23.264	104.389	1.00	2.00
10	ATOM	558	ND1	HIS	A	80	53.609	22.437	103.321	1.00	21.69
	ATOM	559	CD2	HIS	A	80	54.346	24.174	104.414	1.00	14.43
	ATOM	560	CE1	HIS	A	80	54.716	22.837	102.719	1.00	13.51
	ATOM	561	NE2	HIS	A	80	55.184	23.890	103.363	1.00	10.28
	ATOM	562	N	SER	A	81	50.319	22.591	102.781	1.00	10.72
15	ATOM	563	CA	SER	A	81	50.218	22.317	101.344	1.00	13.26
	ATOM	564	C	SER	A	81	49.484	23.422	100.630	1.00	13.09
	ATOM	565	O	SER	A	81	49.908	23.851	99.554	1.00	24.02
	ATOM	566	CB	SER	A	81	49.523	20.989	101.044	1.00	14.11
	ATOM	567	OG	SER	A	81	50.328	19.887	101.432	1.00	46.29
20	ATOM	568	N	GLY	A	82	48.416	23.909	101.256	1.00	6.60
	ATOM	569	CA	GLY	A	82	47.622	24.967	100.664	1.00	3.27
	ATOM	570	C	GLY	A	82	48.419	26.236	100.476	1.00	9.36
	ATOM	571	O	GLY	A	82	48.542	26.742	99.359	1.00	14.89
	ATOM	572	N	LEU	A	83	49.018	26.720	101.559	1.00	2.00
25	ATOM	573	CA	LEU	A	83	49.783	27.948	101.513	1.00	2.00

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	ATOM	574	C	LEU	A	83	50.901	27.796	100.558	1.00	2.00
	ATOM	575	O	LEU	A	83	51.259	28.737	99.860	1.00	8.25
	ATOM	576	CB	LEU	A	83	50.310	28.314	102.886	1.00	4.74
	ATOM	577	CG	LEU	A	83	49.209	28.782	103.821	1.00	3.10
5	ATOM	578	CD1	LEU	A	83	49.749	28.763	105.185	1.00	10.76
	ATOM	579	CD2	LEU	A	83	48.689	30.158	103.452	1.00	2.00
	ATOM	580	N	PHE	A	84	51.404	26.578	100.476	1.00	2.00
	ATOM	581	CA	PHE	A	84	52.487	26.267	99.560	1.00	10.01
	ATOM	582	C	PHE	A	84	52.033	26.384	98.100	1.00	9.20
10	ATOM	583	O	PHE	A	84	52.758	26.872	97.231	1.00	16.83
	ATOM	584	CB	PHE	A	84	52.987	24.865	99.846	1.00	10.98
	ATOM	585	CG	PHE	A	84	54.173	24.497	99.053	1.00	8.39
	ATOM	586	CD1	PHE	A	84	55.292	25.304	99.065	1.00	14.52
	ATOM	587	CD2	PHE	A	84	54.155	23.369	98.242	1.00	26.11
15	ATOM	588	CE1	PHE	A	84	56.376	25.007	98.276	1.00	5.75
	ATOM	589	CE2	PHE	A	84	55.238	23.060	97.448	1.00	13.91
	ATOM	590	CZ	PHE	A	84	56.349	23.883	97.461	1.00	6.41
	ATOM	591	N	LEU	A	85	50.802	25.978	97.858	1.00	12.30
	ATOM	592	CA	LEU	A	85	50.225	26.011	96.540	1.00	6.39
20	ATOM	593	C	LEU	A	85	50.009	27.436	96.085	1.00	9.56
	ATOM	594	O	LEU	A	85	50.380	27.821	94.976	1.00	19.26
	ATOM	595	CB	LEU	A	85	48.906	25.278	96.583	1.00	5.85
	ATOM	596	CG	LEU	A	85	48.165	25.268	95.280	1.00	6.06
	ATOM	597	CD1	LEU	A	85	48.972	24.466	94.270	1.00	15.37
25	ATOM	598	CD2	LEU	A	85	46.825	24.645	95.553	1.00	10.87

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		ATOM	599	N	TYR	A	86	49.401	28.235	96.945	1.00	16.52
		ATOM	600	CA	TYR	A	86	49.131	29.616	96.586	1.00	3.15
		ATOM	601	C	TYR	A	86	50.420	30.374	96.478	1.00	2.62
		ATOM	602	O	TYR	A	86	50.515	31.363	95.777	1.00	16.04
5		ATOM	603	CB	TYR	A	86	48.164	30.261	97.571	1.00	4.75
		ATOM	604	CG	TYR	A	86	46.762	29.665	97.517	1.00	7.88
		ATOM	605	CD1	TYR	A	86	45.963	29.801	96.397	1.00	2.00
		ATOM	606	CD2	TYR	A	86	46.255	28.943	98.582	1.00	2.90
		ATOM	607	CE1	TYR	A	86	44.704	29.227	96.343	1.00	6.60
10		ATOM	608	CE2	TYR	A	86	45.008	28.376	98.535	1.00	9.74
		ATOM	609	CZ	TYR	A	86	44.233	28.513	97.419	1.00	9.30
		ATOM	610	OH	TYR	A	86	42.989	27.906	97.400	1.00	24.47
		ATOM	611	N	GLN	A	87	51.445	29.885	97.141	1.00	11.83
		ATOM	612	CA	GLN	A	87	52.738	30.527	97.033	1.00	14.35
15		ATOM	613	C	GLN	A	87	53.186	30.332	95.581	1.00	21.56
		ATOM	614	O	GLN	A	87	53.777	31.224	94.988	1.00	26.92
		ATOM	615	CB	GLN	A	87	53.721	29.858	97.966	1.00	12.64
		ATOM	616	CG	GLN	A	87	55.072	30.399	97.852	1.00	14.50
		ATOM	617	CD	GLN	A	87	56.094	29.481	98.448	1.00	35.82
20		ATOM	618	OE1	GLN	A	87	57.132	29.227	97.840	1.00	53.89
		ATOM	619	NE2	GLN	A	87	55.824	28.979	99.649	1.00	42.41
		ATOM	620	N	GLY	A	88	52.881	29.165	95.015	1.00	19.53
		ATOM	621	CA	GLY	A	88	53.236	28.875	93.636	1.00	11.97
		ATOM	622	C	GLY	A	88	52.368	29.606	92.627	1.00	15.68
25		ATOM	623	O	GLY	A	88	52.860	30.172	91.647	1.00	12.15

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5	ATOM	624	N	LEU	A	89	51.061	29.607	92.843	1.00	13.61
	ATOM	625	CA	LEU	A	89	50.178	30.303	91.919	1.00	2.25
	ATOM	626	C	LEU	A	89	50.537	31.779	91.797	1.00	5.89
	ATOM	627	O	LEU	A	89	50.624	32.305	90.705	1.00	11.26
	ATOM	628	CB	LEU	A	89	48.723	30.135	92.341	1.00	6.44
10	ATOM	629	CG	LEU	A	89	48.188	28.708	92.244	1.00	6.00
	ATOM	630	CD1	LEU	A	89	46.754	28.691	92.696	1.00	6.92
	ATOM	631	CD2	LEU	A	89	48.285	28.213	90.823	1.00	2.00
	ATOM	632	N	LEU	A	90	50.772	32.441	92.921	1.00	8.29
	ATOM	633	CA	LEU	A	90	51.127	33.852	92.912	1.00	2.00
15	ATOM	634	C	LEU	A	90	52.449	34.066	92.173	1.00	4.21
	ATOM	635	O	LEU	A	90	52.668	35.104	91.566	1.00	15.58
	ATOM	636	CB	LEU	A	90	51.208	34.403	94.346	1.00	2.00
	ATOM	637	CG	LEU	A	90	49.945	34.308	95.217	1.00	2.00
	ATOM	638	CD1	LEU	A	90	50.264	34.611	96.637	1.00	2.00
20	ATOM	639	CD2	LEU	A	90	48.875	35.244	94.751	1.00	2.00
	ATOM	640	N	GLN	A	91	53.342	33.091	92.234	1.00	10.18
	ATOM	641	CA	GLN	A	91	54.615	33.216	91.547	1.00	19.84
	ATOM	642	C	GLN	A	91	54.389	33.099	90.041	1.00	26.03
	ATOM	643	O	GLN	A	91	55.013	33.802	89.255	1.00	33.17
25	ATOM	644	CB	GLN	A	91	55.606	32.134	92.004	1.00	38.30
	ATOM	645	CG	GLN	A	91	56.382	32.439	93.287	1.00	71.50
	ATOM	646	CD	GLN	A	91	57.448	31.386	93.606	1.00	87.37
	ATOM	647	OE1	GLN	A	91	58.261	31.029	92.754	1.00	100.53
	ATOM	648	NE2	GLN	A	91	57.447	30.896	94.839	1.00	92.49

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	ATOM	649	N	ALA	A	92	53.471	32.224	89.653	1.00	22.12
	ATOM	650	CA	ALA	A	92	53.161	31.987	88.254	1.00	7.97
	ATOM	651	C	ALA	A	92	52.625	33.188	87.540	1.00	4.50
	ATOM	652	O	ALA	A	92	52.716	33.277	86.320	1.00	20.13
5	ATOM	653	CB	ALA	A	92	52.172	30.868	88.140	1.00	7.82
	ATOM	654	N	LEU	A	93	52.027	34.103	88.292	1.00	11.36
	ATOM	655	CA	LEU	A	93	51.433	35.314	87.722	1.00	3.76
	ATOM	656	C	LEU	A	93	52.497	36.283	87.253	1.00	11.28
	ATOM	657	O	LEU	A	93	52.188	37.408	86.873	1.00	18.09
10	ATOM	658	CB	LEU	A	93	50.534	36.016	88.753	1.00	2.00
	ATOM	659	CG	LEU	A	93	49.233	35.347	89.162	1.00	6.58
	ATOM	660	CD1	LEU	A	93	48.597	36.146	90.261	1.00	18.98
	ATOM	661	CD2	LEU	A	93	48.303	35.256	87.971	1.00	6.92
	ATOM	662	N	GLU	A	94	53.755	35.882	87.372	1.00	17.10
15	ATOM	663	CA	GLU	A	94	54.878	36.707	86.971	1.00	13.56
	ATOM	664	C	GLU	A	94	54.674	38.222	87.250	1.00	12.98
	ATOM	665	O	GLU	A	94	54.886	39.076	86.380	1.00	24.86
	ATOM	666	CB	GLU	A	94	55.248	36.376	85.527	1.00	15.50
	ATOM	667	CG	GLU	A	94	55.785	34.946	85.367	1.00	59.66
20	ATOM	668	CD	GLU	A	94	55.327	34.252	84.080	1.00	87.89
	ATOM	669	OE1	GLU	A	94	55.101	33.018	84.119	1.00	101.14
	ATOM	670	OE2	GLU	A	94	55.197	34.929	83.032	1.00	97.88
	ATOM	671	N	GLY	A	95	54.209	38.528	88.470	1.00	13.88
	ATOM	672	CA	GLY	A	95	54.007	39.905	88.914	1.00	2.00
25	ATOM	673	C	GLY	A	95	52.813	40.637	88.354	1.00	11.38

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5	ATOM	674	O	GLY	A	95	52.521	41.764	88.763	1.00	6.35
	ATOM	675	N	ILE	A	96	52.100	39.977	87.444	1.00	9.97
	ATOM	676	CA	ILE	A	96	50.928	40.531	86.778	1.00	11.04
	ATOM	677	C	ILE	A	96	51.334	41.703	85.874	1.00	18.54
	ATOM	678	O	ILE	A	96	51.176	41.624	84.664	1.00	29.88
10	ATOM	679	CB	ILE	A	96	49.801	40.956	87.771	1.00	4.87
	ATOM	680	CG1	ILE	A	96	49.292	39.754	88.554	1.00	2.00
	ATOM	681	CG2	ILE	A	96	48.604	41.493	87.008	1.00	2.00
	ATOM	682	CD1	ILE	A	96	48.092	40.109	89.430	1.00	4.14
	ATOM	683	N	SER	A	97	51.860	42.778	86.450	1.00	21.02
15	ATOM	684	CA	SER	A	97	52.295	43.920	85.664	1.00	15.52
	ATOM	685	C	SER	A	97	53.083	44.856	86.562	1.00	25.78
	ATOM	686	O	SER	A	97	53.066	44.723	87.786	1.00	30.90
	ATOM	687	CB	SER	A	97	51.084	44.653	85.098	1.00	16.03
	ATOM	688	OG	SER	A	97	50.488	45.480	86.072	1.00	15.09
20	ATOM	689	N	PRO	A	98	53.810	45.803	85.969	1.00	34.26
	ATOM	690	CA	PRO	A	98	54.593	46.751	86.766	1.00	35.39
	ATOM	691	C	PRO	A	98	53.809	47.464	87.874	1.00	32.27
	ATOM	692	O	PRO	A	98	54.311	47.645	88.990	1.00	34.22
	ATOM	693	CB	PRO	A	98	55.107	47.708	85.703	1.00	25.12
25	ATOM	694	CG	PRO	A	98	55.452	46.718	84.593	1.00	38.70
	ATOM	695	CD	PRO	A	98	54.217	45.844	84.550	1.00	37.21
	ATOM	696	N	GLU	A	99	52.567	47.835	87.575	1.00	37.10
	ATOM	697	CA	GLU	A	99	51.724	48.539	88.542	1.00	41.54
	ATOM	698	C	GLU	A	99	51.409	47.650	89.739	1.00	32.94

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	ATOM	699	O	GLU	A	99	51.333	48.116	90.871	1.00	42.78
	ATOM	700	CB	GLU	A	99	50.412	49.005	87.883	1.00	60.85
	ATOM	701	CG	GLU	A	99	50.567	49.954	86.678	1.00	95.43
	ATOM	702	CD	GLU	A	99	50.820	51.410	87.071	1.00	114.93
5	ATOM	703	OE1	GLU	A	99	50.017	51.972	87.854	1.00	126.83
	ATOM	704	OE2	GLU	A	99	51.814	51.996	86.581	1.00	119.04
	ATOM	705	N	LEU	A	100	51.274	46.358	89.487	1.00	21.33
	ATOM	706	CA	LEU	A	100	50.947	45.409	90.533	1.00	17.31
	ATOM	707	C	LEU	A	100	52.069	44.608	91.147	1.00	11.87
10	ATOM	708	O	LEU	A	100	51.902	44.040	92.224	1.00	17.10
	ATOM	709	CB	LEU	A	100	49.847	44.465	90.068	1.00	11.03
	ATOM	710	CG	LEU	A	100	48.509	45.086	90.452	1.00	13.31
	ATOM	711	CD1	LEU	A	100	48.120	46.117	89.438	1.00	12.26
	ATOM	712	CD2	LEU	A	100	47.458	44.044	90.558	1.00	24.96
15	ATOM	713	N	GLY	A	101	53.221	44.598	90.496	1.00	14.64
	ATOM	714	CA	GLY	A	101	54.354	43.847	91.009	1.00	20.71
	ATOM	715	C	GLY	A	101	54.593	44.012	92.493	1.00	17.63
	ATOM	716	O	GLY	A	101	54.721	43.021	93.202	1.00	28.22
	ATOM	717	N	PRO	A	102	54.641	45.252	92.995	1.00	15.83
20	ATOM	718	CA	PRO	A	102	54.868	45.492	94.417	1.00	6.80
	ATOM	719	C	PRO	A	102	53.795	44.899	95.302	1.00	8.17
	ATOM	720	O	PRO	A	102	54.076	44.129	96.214	1.00	24.79
	ATOM	721	CB	PRO	A	102	54.882	47.013	94.499	1.00	11.16
	ATOM	722	CG	PRO	A	102	55.459	47.407	93.159	1.00	11.95
25	ATOM	723	CD	PRO	A	102	54.674	46.519	92.239	1.00	12.52

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5	ATOM	724	N	THR	A	103	52.552	45.225	95.023	1.00	7.97
	ATOM	725	CA	THR	A	103	51.474	44.712	95.849	1.00	8.59
	ATOM	726	C	THR	A	103	51.433	43.201	95.908	1.00	3.15
	ATOM	727	O	THR	A	103	51.232	42.613	96.968	1.00	10.69
	ATOM	728	CB	THR	A	103	50.137	45.214	95.367	1.00	11.91
10	ATOM	729	OG1	THR	A	103	50.146	46.651	95.340	1.00	23.78
	ATOM	730	CG2	THR	A	103	49.062	44.728	96.296	1.00	18.15
	ATOM	731	N	LEU	A	104	51.667	42.569	94.773	1.00	7.20
	ATOM	732	CA	LEU	A	104	51.635	41.123	94.708	1.00	5.36
	ATOM	733	C	LEU	A	104	52.839	40.504	95.380	1.00	15.45
15	ATOM	734	O	LEU	A	104	52.708	39.459	96.022	1.00	23.36
	ATOM	735	CB	LEU	A	104	51.538	40.679	93.261	1.00	4.11
	ATOM	736	CG	LEU	A	104	51.540	39.194	92.992	1.00	2.00
	ATOM	737	CD1	LEU	A	104	50.344	38.592	93.600	1.00	19.58
	ATOM	738	CD2	LEU	A	104	51.575	38.939	91.523	1.00	17.98
20	ATOM	739	N	ASP	A	105	54.004	41.146	95.249	1.00	22.24
	ATOM	740	CA	ASP	A	105	55.225	40.639	95.876	1.00	16.63
	ATOM	741	C	ASP	A	105	55.040	40.609	97.392	1.00	14.51
	ATOM	742	O	ASP	A	105	55.420	39.643	98.039	1.00	26.79
	ATOM	743	CB	ASP	A	105	56.454	41.457	95.478	1.00	21.93
25	ATOM	744	CG	ASP	A	105	57.767	40.817	95.937	1.00	58.56
	ATOM	745	OD1	ASP	A	105	58.061	39.672	95.523	1.00	68.73
	ATOM	746	OD2	ASP	A	105	58.515	41.461	96.708	1.00	68.61
	ATOM	747	N	THR	A	106	54.391	41.618	97.956	1.00	7.23
	ATOM	748	CA	THR	A	106	54.160	41.622	99.392	1.00	2.00

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	ATOM	749	C	THR	A	106	53.327	40.405	99.734	1.00	5.12
	ATOM	750	O	THR	A	106	53.677	39.622	100.616	1.00	12.67
	ATOM	751	CB	THR	A	106	53.389	42.850	99.826	1.00	6.59
	ATOM	752	OG1	THR	A	106	54.187	44.016	99.633	1.00	12.01
5	ATOM	753	CG2	THR	A	106	53.030	42.742	101.269	1.00	21.80
	ATOM	754	N	LEU	A	107	52.229	40.241	99.012	1.00	6.15
	ATOM	755	CA	LEU	A	107	51.369	39.115	99.253	1.00	5.33
	ATOM	756	C	LEU	A	107	52.112	37.797	99.161	1.00	4.09
	ATOM	757	O	LEU	A	107	51.944	36.938	100.033	1.00	14.54
10	ATOM	758	CB	LEU	A	107	50.189	39.108	98.292	1.00	2.00
	ATOM	759	CG	LEU	A	107	49.258	37.913	98.504	1.00	2.00
	ATOM	760	CD1	LEU	A	107	48.845	37.753	99.969	1.00	2.00
	ATOM	761	CD2	LEU	A	107	48.052	38.071	97.655	1.00	3.90
	ATOM	762	N	GLN	A	108	52.981	37.647	98.163	1.00	3.95
15	ATOM	763	CA	GLN	A	108	53.690	36.366	97.996	1.00	5.90
	ATOM	764	C	GLN	A	108	54.765	36.050	99.006	1.00	7.20
	ATOM	765	O	GLN	A	108	54.910	34.902	99.406	1.00	15.70
	ATOM	766	CB	GLN	A	108	54.093	36.116	96.537	1.00	2.00
	ATOM	767	CG	GLN	A	108	55.534	35.885	96.214	1.00	16.05
20	ATOM	768	CD	GLN	A	108	56.061	34.531	96.586	1.00	30.17
	ATOM	769	OE1	GLN	A	108	57.209	34.416	97.010	1.00	46.90
	ATOM	770	NE2	GLN	A	108	55.263	33.490	96.390	1.00	31.27
	ATOM	771	N	LEU	A	109	55.455	37.063	99.505	1.00	10.10
	ATOM	772	CA	LEU	A	109	56.462	36.816	100.530	1.00	2.00
25	ATOM	773	C	LEU	A	109	55.726	36.445	101.803	1.00	6.86

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5	ATOM	774	O	LEU	A	109	56.064	35.456	102.446	1.00	7.81
	ATOM	775	CB	LEU	A	109	57.303	38.039	100.786	1.00	7.95
	ATOM	776	CG	LEU	A	109	58.462	38.301	99.850	1.00	18.82
	ATOM	777	CD1	LEU	A	109	58.987	39.702	100.150	1.00	19.31
	ATOM	778	CD2	LEU	A	109	59.526	37.235	100.065	1.00	15.79
10	ATOM	779	N	ASP	A	110	54.678	37.190	102.134	1.00	6.74
	ATOM	780	CA	ASP	A	110	53.917	36.881	103.331	1.00	2.00
	ATOM	781	C	ASP	A	110	53.356	35.477	103.323	1.00	2.74
	ATOM	782	O	ASP	A	110	53.384	34.816	104.362	1.00	2.16
	ATOM	783	CB	ASP	A	110	52.835	37.926	103.575	1.00	2.00
15	ATOM	784	CG	ASP	A	110	53.405	39.214	104.136	1.00	18.29
	ATOM	785	OD1	ASP	A	110	53.993	39.166	105.232	1.00	42.51
	ATOM	786	OD2	ASP	A	110	53.295	40.268	103.490	1.00	25.36
	ATOM	787	N	VAL	A	111	52.913	35.001	102.153	1.00	5.96
	ATOM	788	CA	VAL	A	111	52.368	33.649	102.037	1.00	2.00
20	ATOM	789	C	VAL	A	111	53.470	32.617	102.122	1.00	2.00
	ATOM	790	O	VAL	A	111	53.333	31.618	102.813	1.00	2.00
	ATOM	791	CB	VAL	A	111	51.588	33.441	100.768	1.00	2.00
	ATOM	792	CG1	VAL	A	111	51.155	32.017	100.691	1.00	2.00
	ATOM	793	CG2	VAL	A	111	50.366	34.317	100.765	1.00	2.00
25	ATOM	794	N	ALA	A	112	54.608	32.905	101.510	1.00	2.00
	ATOM	795	CA	ALA	A	112	55.728	31.981	101.559	1.00	2.00
	ATOM	796	C	ALA	A	112	56.214	31.746	102.995	1.00	10.03
	ATOM	797	O	ALA	A	112	56.323	30.608	103.442	1.00	12.49
	ATOM	798	CB	ALA	A	112	56.855	32.484	100.690	1.00	2.00

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	ATOM	799	N	ASP	A	113	56.452	32.819	103.737	1.00	20.90
	ATOM	800	CA	ASP	A	113	56.919	32.698	105.118	1.00	13.95
	ATOM	801	C	ASP	A	113	55.916	32.035	106.023	1.00	11.76
	ATOM	802	O	ASP	A	113	56.287	31.323	106.922	1.00	16.76
5	ATOM	803	CB	ASP	A	113	57.266	34.056	105.682	1.00	26.72
	ATOM	804	CG	ASP	A	113	58.423	34.713	104.953	1.00	36.51
	ATOM	805	OD1	ASP	A	113	58.753	34.322	103.809	1.00	35.13
	ATOM	806	OD2	ASP	A	113	59.009	35.635	105.543	1.00	46.00
	ATOM	807	N	PHE	A	114	54.638	32.276	105.808	1.00	11.20
10	ATOM	808	CA	PHE	A	114	53.660	31.629	106.640	1.00	2.00
	ATOM	809	C	PHE	A	114	53.772	30.147	106.372	1.00	6.88
	ATOM	810	O	PHE	A	114	53.700	29.340	107.281	1.00	23.20
	ATOM	811	CB	PHE	A	114	52.276	32.117	106.276	1.00	2.00
	ATOM	812	CG	PHE	A	114	51.193	31.596	107.166	1.00	2.00
15	ATOM	813	CD1	PHE	A	114	51.491	30.950	108.344	1.00	2.00
	ATOM	814	CD2	PHE	A	114	49.860	31.737	106.812	1.00	6.04
	ATOM	815	CE1	PHE	A	114	50.493	30.450	109.157	1.00	2.00
	ATOM	816	CE2	PHE	A	114	48.843	31.231	107.636	1.00	9.12
	ATOM	817	CZ	PHE	A	114	49.173	30.588	108.807	1.00	2.00
20	ATOM	818	N	ALA	A	115	53.953	29.775	105.117	1.00	5.66
	ATOM	819	CA	ALA	A	115	54.064	28.372	104.811	1.00	2.00
	ATOM	820	C	ALA	A	115	55.330	27.825	105.447	1.00	4.79
	ATOM	821	O	ALA	A	115	55.306	26.779	106.071	1.00	8.68
	ATOM	822	CB	ALA	A	115	54.097	28.177	103.346	1.00	2.00
25	ATOM	823	N	THR	A	116	56.426	28.574	105.365	1.00	10.63

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	ATOM	824	CA	THR	A	116	57.713	28.132	105.918	1.00	2.00
	ATOM	825	C	THR	A	116	57.621	27.937	107.428	1.00	2.00
	ATOM	826	O	THR	A	116	58.071	26.953	107.980	1.00	14.69
	ATOM	827	CB	THR	A	116	58.826	29.154	105.592	1.00	7.55
5	ATOM	828	OG1	THR	A	116	58.918	29.381	104.177	1.00	19.15
	ATOM	829	CG2	THR	A	116	60.135	28.661	106.079	1.00	2.00
	ATOM	830	N	THR	A	117	57.030	28.918	108.071	1.00	8.73
	ATOM	831	CA	THR	A	117	56.805	28.967	109.490	1.00	2.00
	ATOM	832	C	THR	A	117	56.101	27.716	109.964	1.00	2.00
10	ATOM	833	O	THR	A	117	56.492	27.103	110.950	1.00	22.51
	ATOM	834	CB	THR	A	117	55.965	30.201	109.724	1.00	2.89
	ATOM	835	OG1	THR	A	117	56.848	31.308	109.870	1.00	29.13
	ATOM	836	CG2	THR	A	117	55.005	30.064	110.878	1.00	3.79
	ATOM	837	N	ILE	A	118	55.063	27.336	109.237	1.00	12.72
15	ATOM	838	CA	ILE	A	118	54.276	26.152	109.565	1.00	10.65
	ATOM	839	C	ILE	A	118	55.118	24.890	109.381	1.00	11.73
	ATOM	840	O	ILE	A	118	55.053	23.955	110.176	1.00	15.78
	ATOM	841	CB	ILE	A	118	52.981	26.054	108.698	1.00	2.00
	ATOM	842	CG1	ILE	A	118	52.020	27.205	109.021	1.00	2.20
20	ATOM	843	CG2	ILE	A	118	52.296	24.742	108.938	1.00	3.23
	ATOM	844	CD1	ILE	A	118	50.581	26.949	108.610	1.00	10.30
	ATOM	845	N	TRP	A	119	55.955	24.878	108.364	1.00	10.40
	ATOM	846	CA	TRP	A	119	56.780	23.706	108.149	1.00	16.55
	ATOM	847	C	TRP	A	119	57.732	23.512	109.325	1.00	14.84
25	ATOM	848	O	TRP	A	119	57.701	22.491	109.999	1.00	19.66

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5	ATOM	849	CB	TRP	A	119	57.553	23.837	106.834	1.00	21.44
	ATOM	850	CG	TRP	A	119	58.348	22.613	106.438	1.00	26.59
	ATOM	851	CD1	TRP	A	119	59.698	22.461	106.511	1.00	32.13
	ATOM	852	CD2	TRP	A	119	57.836	21.374	105.928	1.00	24.63
	ATOM	853	NE1	TRP	A	119	60.059	21.208	106.093	1.00	31.50
10	ATOM	854	CE2	TRP	A	119	58.937	20.518	105.728	1.00	23.35
	ATOM	855	CE3	TRP	A	119	56.556	20.904	105.624	1.00	25.88
	ATOM	856	CZ2	TRP	A	119	58.799	19.223	105.242	1.00	21.30
	ATOM	857	CZ3	TRP	A	119	56.422	19.612	105.140	1.00	30.18
	ATOM	858	CH2	TRP	A	119	57.539	18.788	104.956	1.00	26.99
15	ATOM	859	N	GLN	A	120	58.516	24.534	109.619	1.00	13.94
	ATOM	860	CA	GLN	A	120	59.485	24.464	110.693	1.00	4.83
	ATOM	861	C	GLN	A	120	58.886	24.120	112.027	1.00	9.74
	ATOM	862	O	GLN	A	120	59.549	23.503	112.848	1.00	21.70
	ATOM	863	CB	GLN	A	120	60.273	25.754	110.758	1.00	3.11
20	ATOM	864	CG	GLN	A	120	60.922	26.086	109.405	1.00	8.81
	ATOM	865	CD	GLN	A	120	61.793	27.321	109.437	1.00	9.72
	ATOM	866	OE1	GLN	A	120	61.692	28.147	110.348	1.00	24.10
	ATOM	867	NE2	GLN	A	120	62.651	27.460	108.440	1.00	3.75
	ATOM	868	N	GLN	A	121	57.639	24.509	112.256	1.00	10.83
25	ATOM	869	CA	GLN	A	121	57.000	24.165	113.508	1.00	10.77
	ATOM	870	C	GLN	A	121	56.763	22.670	113.472	1.00	19.38
	ATOM	871	O	GLN	A	121	57.123	21.965	114.410	1.00	30.71
	ATOM	872	CB	GLN	A	121	55.680	24.896	113.696	1.00	11.16
	ATOM	873	CG	GLN	A	121	55.069	24.708	115.098	1.00	25.86

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	ATOM	874	CD	GLN	A	121	55.927	25.267	116.247	1.00	24.02
	ATOM	875	OE1	GLN	A	121	55.822	24.801	117.376	1.00	24.06
	ATOM	876	NE2	GLN	A	121	56.751	26.283	115.963	1.00	23.56
	ATOM	877	N	MET	A	122	56.211	22.174	112.364	1.00	25.12
5	ATOM	878	CA	MET	A	122	55.948	20.737	112.216	1.00	16.60
	ATOM	879	C	MET	A	122	57.215	19.933	112.463	1.00	20.42
	ATOM	880	O	MET	A	122	57.160	18.897	113.109	1.00	32.08
	ATOM	881	CB	MET	A	122	55.386	20.386	110.832	1.00	11.50
	ATOM	882	CG	MET	A	122	53.945	20.799	110.602	1.00	2.00
10	ATOM	883	SD	MET	A	122	53.137	20.033	109.150	1.00	28.29
	ATOM	884	CE	MET	A	122	54.063	20.574	107.951	1.00	2.72
	ATOM	885	N	GLU	A	123	58.352	20.403	111.954	1.00	20.68
	ATOM	886	CA	GLU	A	123	59.624	19.716	112.162	1.00	11.72
	ATOM	887	C	GLU	A	123	59.967	19.681	113.655	1.00	13.94
15	ATOM	888	O	GLU	A	123	60.129	18.613	114.239	1.00	27.69
	ATOM	889	CB	GLU	A	123	60.748	20.384	111.354	1.00	8.30
	ATOM	890	CG	GLU	A	123	60.447	20.471	109.855	1.00	36.37
	ATOM	891	CD	GLU	A	123	61.688	20.536	108.963	1.00	50.92
	ATOM	892	OE1	GLU	A	123	62.373	21.584	108.930	1.00	48.95
20	ATOM	893	OE2	GLU	A	123	61.960	19.533	108.260	1.00	75.83
	ATOM	894	N	GLU	A	124	59.983	20.846	114.289	1.00	20.84
	ATOM	895	CA	GLU	A	124	60.296	20.965	115.707	1.00	14.61
	ATOM	896	C	GLU	A	124	59.494	19.997	116.605	1.00	12.97
	ATOM	897	O	GLU	A	124	60.043	19.358	117.497	1.00	37.61
25	ATOM	898	CB	GLU	A	124	60.091	22.418	116.135	1.00	12.36

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	ATOM	899	CG	GLU	A	124	60.550	22.751	117.552	1.00	58.43
	ATOM	900	CD	GLU	A	124	60.254	24.193	117.954	1.00	71.94
	ATOM	901	OE1	GLU	A	124	60.720	25.124	117.257	1.00	73.82
	ATOM	902	OE2	GLU	A	124	59.560	24.390	118.980	1.00	81.64
5	ATOM	903	N	LEU	A	125	58.204	19.869	116.356	1.00	10.08
	ATOM	904	CA	LEU	A	125	57.359	18.988	117.159	1.00	27.44
	ATOM	905	C	LEU	A	125	57.421	17.546	116.711	1.00	28.14
	ATOM	906	O	LEU	A	125	56.805	16.677	117.335	1.00	38.63
	ATOM	907	CB	LEU	A	125	55.895	19.451	117.109	1.00	31.49
10	ATOM	908	CG	LEU	A	125	55.522	20.829	117.679	1.00	29.26
	ATOM	909	CD1	LEU	A	125	54.087	21.122	117.330	1.00	18.63
	ATOM	910	CD2	LEU	A	125	55.733	20.894	119.195	1.00	31.12
	ATOM	911	N	GLY	A	126	58.122	17.314	115.605	1.00	30.62
	ATOM	912	CA	GLY	A	126	58.258	15.979	115.041	1.00	33.30
15	ATOM	913	C	GLY	A	126	57.055	15.503	114.236	1.00	33.92
	ATOM	914	O	GLY	A	126	56.511	14.439	114.513	1.00	44.33
	ATOM	915	N	MET	A	127	56.665	16.262	113.215	1.00	33.66
	ATOM	916	CA	MET	A	127	55.516	15.920	112.378	1.00	31.22
	ATOM	917	C	MET	A	127	55.816	15.949	110.874	1.00	45.58
20	ATOM	918	O	MET	A	127	55.103	15.320	110.083	1.00	53.84
	ATOM	919	CB	MET	A	127	54.375	16.905	112.615	1.00	26.47
	ATOM	920	CG	MET	A	127	53.927	17.117	114.043	1.00	17.06
	ATOM	921	SD	MET	A	127	52.205	17.744	114.081	1.00	51.35
	ATOM	922	CE	MET	A	127	52.237	18.825	115.432	1.00	18.31
25	ATOM	923	N	ALA	A	128	56.836	16.718	110.492	1.00	50.44

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	ATOM	924	CA	ALA	A	128	57.233	16.904	109.097	1.00	62.49
	ATOM	925	C	ALA	A	128	57.355	15.638	108.277	1.00	80.73
	ATOM	926	O	ALA	A	128	58.297	14.861	108.469	1.00	85.51
	ATOM	927	CB	ALA	A	128	58.523	17.667	109.030	1.00	63.32
5	ATOM	928	N	PRO	A	129	56.425	15.429	107.322	1.00	92.10
	ATOM	929	CA	PRO	A	129	56.488	14.225	106.493	1.00	99.87
	ATOM	930	C	PRO	A	129	57.786	14.157	105.688	1.00	105.38
	ATOM	931	O	PRO	A	129	58.395	15.187	105.381	1.00	104.10
	ATOM	932	CB	PRO	A	129	55.243	14.352	105.597	1.00	99.91
10	ATOM	933	CG	PRO	A	129	54.992	15.819	105.537	1.00	93.41
	ATOM	934	CD	PRO	A	129	55.258	16.253	106.955	1.00	94.41
	ATOM	935	N	ALA	A	130	58.241	12.933	105.423	1.00	112.90
	ATOM	936	CA	ALA	A	130	59.456	12.719	104.644	1.00	116.46
	ATOM	937	C	ALA	A	130	59.189	13.300	103.263	1.00	120.64
15	ATOM	938	O	ALA	A	130	60.102	13.811	102.601	1.00	115.91
	ATOM	939	CB	ALA	A	130	59.770	11.231	104.543	1.00	110.28
	ATOM	940	N	LEU	A	131	57.921	13.228	102.848	1.00	119.12
	ATOM	941	CA	LEU	A	131	57.494	13.769	101.538	1.00	127.23
	ATOM	942	C	LEU	A	131	57.175	15.296	101.560	1.00	131.67
20	ATOM	943	O	LEU	A	131	56.136	15.758	102.134	1.00	128.18
	ATOM	944	CB	LEU	A	131	56.263	12.967	100.968	1.00	134.86
	ATOM	945	N	GLN	A	132	58.080	16.069	100.960	1.00	145.96
	ATOM	946	CA	GLN	A	132	57.880	17.503	100.851	1.00	149.49
	ATOM	947	C	GLN	A	132	56.790	17.617	99.795	1.00	150.80
25	ATOM	948	O	GLN	A	132	56.782	16.866	98.813	1.00	146.22

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		ATOM	949	CB	GLN	A	132	59.159	18.214	100.407	1.00	148.93
		ATOM	950	CG	GLN	A	132	60.240	18.229	101.469	1.00	166.71
		ATOM	951	CD	GLN	A	132	61.252	19.325	101.244	1.00	180.08
		ATOM	952	OE1	GLN	A	132	60.921	20.509	101.294	1.00	187.64
5		ATOM	953	NE2	GLN	A	132	62.493	18.942	100.997	1.00	189.77
		ATOM	954	N	PRO	A	133	55.836	18.531	99.999	1.00	153.09
		ATOM	955	CA	PRO	A	133	54.742	18.710	99.048	1.00	158.62
		ATOM	956	C	PRO	A	133	55.240	18.851	97.625	1.00	164.29
		ATOM	957	O	PRO	A	133	55.924	19.820	97.279	1.00	164.96
10		ATOM	958	CB	PRO	A	133	54.069	19.989	99.544	1.00	157.83
		ATOM	959	CG	PRO	A	133	55.197	20.735	100.170	1.00	156.22
		ATOM	960	CD	PRO	A	133	55.884	19.653	100.946	1.00	154.95
		ATOM	961	N	THR	A	134	54.982	17.820	96.830	1.00	169.77
		ATOM	962	CA	THR	A	134	55.366	17.834	95.434	1.00	172.45
15		ATOM	963	C	THR	A	134	54.606	19.035	94.895	1.00	163.60
		ATOM	964	O	THR	A	134	53.379	18.985	94.779	1.00	164.57
		ATOM	965	CB	THR	A	134	54.902	16.541	94.731	1.00	181.43
		ATOM	966	OG1	THR	A	134	53.536	16.273	95.073	1.00	188.51
		ATOM	967	CG2	THR	A	134	55.758	15.361	95.172	1.00	188.31
20		ATOM	968	N	GLN	A	135	55.319	20.146	94.718	1.00	150.68
		ATOM	969	CA	GLN	A	135	54.721	21.386	94.231	1.00	138.33
		ATOM	970	C	GLN	A	135	53.604	21.111	93.231	1.00	139.82
		ATOM	971	O	GLN	A	135	53.802	20.382	92.255	1.00	142.54
		ATOM	972	CB	GLN	A	135	55.790	22.300	93.620	1.00	119.30
25		ATOM	973	CG	GLN	A	135	55.247	23.612	93.046	1.00	90.55

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5	ATOM	974	CD	GLN	A	135	54.513	24.479	94.070	1.00	75.84
	ATOM	975	OE1	GLN	A	135	53.348	24.222	94.425	1.00	51.96
	ATOM	976	NE2	GLN	A	135	55.183	25.528	94.529	1.00	64.33
	ATOM	977	N	GLY	A	136	52.419	21.646	93.527	1.00	135.41
	ATOM	978	CA	GLY	A	136	51.261	21.450	92.671	1.00	127.45
10	ATOM	979	C	GLY	A	136	51.494	21.835	91.219	1.00	121.82
	ATOM	980	O	GLY	A	136	52.475	22.507	90.897	1.00	121.96
	ATOM	981	N	ALA	A	137	50.592	21.402	90.338	1.00	115.54
	ATOM	982	CA	ALA	A	137	50.691	21.703	88.906	1.00	102.92
	ATOM	983	C	ALA	A	137	50.432	23.189	88.680	1.00	90.63
15	ATOM	984	O	ALA	A	137	49.341	23.696	88.977	1.00	84.52
	ATOM	985	CB	ALA	A	137	49.692	20.858	88.114	1.00	109.21
	ATOM	986	N	MET	A	138	51.430	23.885	88.148	1.00	73.26
	ATOM	987	CA	MET	A	138	51.290	25.314	87.941	1.00	61.15
	ATOM	988	C	MET	A	138	50.730	25.749	86.612	1.00	50.20
20	ATOM	989	O	MET	A	138	51.223	25.345	85.567	1.00	49.68
	ATOM	990	CB	MET	A	138	52.600	26.052	88.226	1.00	62.93
	ATOM	991	CG	MET	A	138	52.975	26.123	89.714	1.00	60.98
	ATOM	992	SD	MET	A	138	51.689	26.822	90.782	1.00	58.64
	ATOM	993	CE	MET	A	138	51.119	25.390	91.675	1.00	51.84
25	ATOM	994	N	PRO	A	139	49.667	26.577	86.655	1.00	45.40
	ATOM	995	CA	PRO	A	139	48.900	27.186	85.572	1.00	40.27
	ATOM	996	C	PRO	A	139	49.768	28.008	84.626	1.00	42.98
	ATOM	997	O	PRO	A	139	50.866	28.443	84.980	1.00	43.13
	ATOM	998	CB	PRO	A	139	47.916	28.069	86.326	1.00	34.80

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	ATOM	999	CG	PRO	A	139	47.628	27.272	87.504	1.00	44.01
	ATOM	1000	CD	PRO	A	139	49.004	26.861	87.940	1.00	49.39
	ATOM	1001	N	ALA	A	140	49.214	28.277	83.450	1.00	43.98
	ATOM	1002	CA	ALA	A	140	49.901	28.999	82.400	1.00	42.85
5	ATOM	1003	C	ALA	A	140	49.924	30.525	82.453	1.00	45.34
	ATOM	1004	O	ALA	A	140	51.001	31.122	82.457	1.00	44.52
	ATOM	1005	CB	ALA	A	140	49.366	28.541	81.060	1.00	59.81
	ATOM	1006	N	PHE	A	141	48.743	31.148	82.420	1.00	39.95
	ATOM	1007	CA	PHE	A	141	48.611	32.613	82.414	1.00	34.95
10	ATOM	1008	C	PHE	A	141	49.445	33.167	81.266	1.00	39.66
	ATOM	1009	O	PHE	A	141	50.458	33.819	81.488	1.00	44.82
	ATOM	1010	CB	PHE	A	141	49.090	33.230	83.724	1.00	23.93
	ATOM	1011	CG	PHE	A	141	48.519	32.580	84.953	1.00	26.19
	ATOM	1012	CD1	PHE	A	141	47.144	32.486	85.139	1.00	18.03
15	ATOM	1013	CD2	PHE	A	141	49.360	32.068	85.937	1.00	29.80
	ATOM	1014	CE1	PHE	A	141	46.618	31.894	86.286	1.00	17.32
	ATOM	1015	CE2	PHE	A	141	48.842	31.476	87.087	1.00	31.06
	ATOM	1016	CZ	PHE	A	141	47.472	31.390	87.262	1.00	15.76
	ATOM	1017	N	ALA	A	142	48.994	32.895	80.042	1.00	45.71
20	ATOM	1018	CA	ALA	A	142	49.667	33.293	78.801	1.00	42.47
	ATOM	1019	C	ALA	A	142	49.542	34.742	78.300	1.00	38.39
	ATOM	1020	O	ALA	A	142	50.328	35.177	77.461	1.00	52.80
	ATOM	1021	CB	ALA	A	142	49.281	32.311	77.674	1.00	49.99
	ATOM	1022	N	SER	A	143	48.571	35.494	78.784	1.00	27.65
25	ATOM	1023	CA	SER	A	143	48.420	36.864	78.322	1.00	16.40

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		ATOM 1024	C	SER A 143	48.240	37.809	79.483	1.00	18.30
		ATOM 1025	O	SER A 143	48.027	37.403	80.632	1.00	11.06
		ATOM 1026	CB	SER A 143	47.186	36.990	77.446	1.00	23.64
		ATOM 1027	OG	SER A 143	46.004	37.038	78.242	1.00	28.60
5		ATOM 1028	N	ALA A 144	48.214	39.086	79.157	1.00	10.74
		ATOM 1029	CA	ALA A 144	48.026	40.095	80.175	1.00	9.30
		ATOM 1030	C	ALA A 144	46.740	39.803	80.890	1.00	20.56
		ATOM 1031	O	ALA A 144	46.683	39.728	82.113	1.00	31.27
		ATOM 1032	CB	ALA A 144	47.938	41.452	79.547	1.00	15.68
10		ATOM 1033	N	PHE A 145	45.699	39.608	80.104	1.00	23.83
		ATOM 1034	CA	PHE A 145	44.407	39.352	80.671	1.00	15.28
		ATOM 1035	C	PHE A 145	44.427	38.097	81.525	1.00	18.99
		ATOM 1036	O	PHE A 145	43.890	38.086	82.639	1.00	15.98
		ATOM 1037	CB	PHE A 145	43.360	39.221	79.578	1.00	18.93
15		ATOM 1038	CG	PHE A 145	42.000	38.943	80.107	1.00	13.62
		ATOM 1039	CD1	PHE A 145	41.334	39.910	80.844	1.00	19.07
		ATOM 1040	CD2	PHE A 145	41.427	37.684	79.960	1.00	11.10
		ATOM 1041	CE1	PHE A 145	40.118	39.636	81.441	1.00	2.00
		ATOM 1042	CE2	PHE A 145	40.211	37.386	80.553	1.00	2.25
20		ATOM 1043	CZ	PHE A 145	39.554	38.369	81.297	1.00	13.07
		ATOM 1044	N	GLN A 146	45.059	37.041	81.030	1.00	3.45
		ATOM 1045	CA	GLN A 146	45.084	35.814	81.816	1.00	5.09
		ATOM 1046	C	GLN A 146	45.738	36.065	83.176	1.00	6.55
		ATOM 1047	O	GLN A 146	45.242	35.624	84.193	1.00	25.77
25		ATOM 1048	CB	GLN A 146	45.757	34.662	81.049	1.00	15.66

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		ATOM 1049	CG	GLN	A	146	44.947	34.141	79.839	1.00	7.34
		ATOM 1050	CD	GLN	A	146	45.525	32.874	79.253	1.00	19.85
		ATOM 1051	OE1	GLN	A	146	46.721	32.777	79.048	1.00	30.09
		ATOM 1052	NE2	GLN	A	146	44.677	31.899	78.973	1.00	24.58
5		ATOM 1053	N	ARG	A	147	46.794	36.858	83.200	1.00	17.77
		ATOM 1054	CA	ARG	A	147	47.470	37.173	84.443	1.00	2.00
		ATOM 1055	C	ARG	A	147	46.578	38.021	85.347	1.00	11.43
		ATOM 1056	O	ARG	A	147	46.521	37.788	86.551	1.00	25.56
		ATOM 1057	CB	ARG	A	147	48.769	37.911	84.137	1.00	2.00
10		ATOM 1058	CG	ARG	A	147	49.878	37.019	83.586	1.00	12.59
		ATOM 1059	CD	ARG	A	147	51.117	37.821	83.208	1.00	18.50
		ATOM 1060	NE	ARG	A	147	50.969	38.443	81.895	1.00	42.05
		ATOM 1061	CZ	ARG	A	147	51.580	39.561	81.521	1.00	44.42
		ATOM 1062	NH1	ARG	A	147	52.384	40.193	82.367	1.00	63.98
15		ATOM 1063	NH2	ARG	A	147	51.423	40.027	80.289	1.00	44.39
		ATOM 1064	N	ARG	A	148	45.869	38.988	84.767	1.00	13.59
		ATOM 1065	CA	ARG	A	148	44.984	39.879	85.528	1.00	8.15
		ATOM 1066	C	ARG	A	148	43.800	39.134	86.101	1.00	8.68
		ATOM 1067	O	ARG	A	148	43.413	39.359	87.237	1.00	19.46
20		ATOM 1068	CB	ARG	A	148	44.485	41.027	84.653	1.00	4.34
		ATOM 1069	CG	ARG	A	148	45.591	41.742	83.934	1.00	3.11
		ATOM 1070	CD	ARG	A	148	45.135	42.893	83.072	1.00	22.23
		ATOM 1071	NE	ARG	A	148	46.283	43.610	82.511	1.00	27.59
		ATOM 1072	CZ	ARG	A	148	46.200	44.687	81.742	1.00	23.17
25		ATOM 1073	NH1	ARG	A	148	45.021	45.194	81.414	1.00	33.46

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		ATOM 1074	NH2	ARG	A	148	47.309	45.291	81.348	1.00	35.81
		ATOM 1075	N	ALA	A	149	43.210	38.249	85.316	1.00	12.08
		ATOM 1076	CA	ALA	A	149	42.075	37.484	85.800	1.00	12.64
		ATOM 1077	C	ALA	A	149	42.592	36.481	86.806	1.00	12.35
5		ATOM 1078	O	ALA	A	149	42.067	36.385	87.912	1.00	27.45
		ATOM 1079	CB	ALA	A	149	41.404	36.770	84.678	1.00	5.93
		ATOM 1080	N	GLY	A	150	43.639	35.757	86.423	1.00	6.79
		ATOM 1081	CA	GLY	A	150	44.248	34.766	87.295	1.00	2.00
		ATOM 1082	C	GLY	A	150	44.486	35.364	88.668	1.00	14.74
10		ATOM 1083	O	GLY	A	150	44.182	34.756	89.690	1.00	27.91
		ATOM 1084	N	GLY	A	151	44.970	36.594	88.686	1.00	11.32
		ATOM 1085	CA	GLY	A	151	45.212	37.270	89.938	1.00	5.73
		ATOM 1086	C	GLY	A	151	43.946	37.391	90.745	1.00	5.77
		ATOM 1087	O	GLY	A	151	43.936	37.038	91.919	1.00	15.43
15		ATOM 1088	N	VAL	A	152	42.871	37.854	90.120	1.00	4.35
		ATOM 1089	CA	VAL	A	152	41.615	38.009	90.824	1.00	2.06
		ATOM 1090	C	VAL	A	152	41.106	36.691	91.367	1.00	5.21
		ATOM 1091	O	VAL	A	152	40.554	36.631	92.469	1.00	15.36
		ATOM 1092	CB	VAL	A	152	40.571	38.605	89.933	1.00	2.00
20		ATOM 1093	CG1	VAL	A	152	39.218	38.544	90.607	1.00	9.35
		ATOM 1094	CG2	VAL	A	152	40.923	40.028	89.664	1.00	7.60
		ATOM 1095	N	LEU	A	153	41.310	35.634	90.596	1.00	3.72
		ATOM 1096	CA	LEU	A	153	40.889	34.304	91.003	1.00	3.58
		ATOM 1097	C	LEU	A	153	41.728	33.761	92.133	1.00	7.42
25		ATOM 1098	O	LEU	A	153	41.188	33.323	93.151	1.00	17.63

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	ATOM 1099 CB	LEU A 153	40.944	33.337	89.838	1.00	5.60
	ATOM 1100 CG	LEU A 153	39.783	33.577	88.903	1.00	15.20
	ATOM 1101 CD1	LEU A 153	39.858	32.700	87.677	1.00	10.85
	ATOM 1102 CD2	LEU A 153	38.539	33.333	89.691	1.00	7.86
5	ATOM 1103 N	VAL A 154	43.041	33.754	91.947	1.00	10.83
	ATOM 1104 CA	VAL A 154	43.958	33.263	92.980	1.00	15.98
	ATOM 1105 C	VAL A 154	43.738	34.013	94.293	1.00	6.33
	ATOM 1106 O	VAL A 154	43.612	33.416	95.348	1.00	20.00
	ATOM 1107 CB	VAL A 154	45.431	33.374	92.546	1.00	12.42
10	ATOM 1108 CG1	VAL A 154	46.325	32.955	93.660	1.00	3.98
	ATOM 1109 CG2	VAL A 154	45.683	32.519	91.336	1.00	2.00
	ATOM 1110 N	ALA A 155	43.601	35.315	94.212	1.00	2.00
	ATOM 1111 CA	ALA A 155	43.347	36.088	95.397	1.00	2.00
	ATOM 1112 C	ALA A 155	42.043	35.662	96.036	1.00	5.28
15	ATOM 1113 O	ALA A 155	41.923	35.628	97.253	1.00	20.59
	ATOM 1114 CB	ALA A 155	43.256	37.511	95.036	1.00	8.07
	ATOM 1115 N	SER A 156	41.050	35.366	95.213	1.00	8.01
	ATOM 1116 CA	SER A 156	39.749	34.985	95.721	1.00	2.28
	ATOM 1117 C	SER A 156	39.811	33.638	96.408	1.00	5.37
20	ATOM 1118 O	SER A 156	39.143	33.430	97.411	1.00	12.72
	ATOM 1119 CB	SER A 156	38.736	34.960	94.588	1.00	2.00
	ATOM 1120 OG	SER A 156	37.412	35.050	95.086	1.00	46.36
	ATOM 1121 N	HIS A 157	40.622	32.727	95.880	1.00	5.37
	ATOM 1122 CA	HIS A 157	40.747	31.392	96.455	1.00	5.03
25	ATOM 1123 C	HIS A 157	41.569	31.433	97.719	1.00	9.12

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	ATOM 1124 O	HIS A 157	41.279	30.732	98.691	1.00	13.03
	ATOM 1125 CB	HIS A 157	41.398	30.421	95.481	1.00	3.02
	ATOM 1126 CG	HIS A 157	40.517	30.024	94.342	1.00	21.35
	ATOM 1127 ND1	HIS A 157	40.868	29.046	93.437	1.00	29.70
5	ATOM 1128 CD2	HIS A 157	39.314	30.497	93.941	1.00	19.82
	ATOM 1129 CE1	HIS A 157	39.921	28.939	92.523	1.00	27.64
	ATOM 1130 NE2	HIS A 157	38.967	29.808	92.807	1.00	15.97
	ATOM 1131 N	LEU A 158	42.620	32.235	97.694	1.00	10.33
	ATOM 1132 CA	LEU A 158	43.475	32.385	98.851	1.00	5.20
10	ATOM 1133 C	LEU A 158	42.602	32.883	99.965	1.00	2.00
	ATOM 1134 O	LEU A 158	42.634	32.365	101.052	1.00	13.61
	ATOM 1135 CB	LEU A 158	44.553	33.415	98.597	1.00	2.00
	ATOM 1136 CG	LEU A 158	45.522	33.581	99.751	1.00	5.32
	ATOM 1137 CD1	LEU A 158	46.182	32.273	100.079	1.00	2.00
15	ATOM 1138 CD2	LEU A 158	46.560	34.558	99.326	1.00	9.58
	ATOM 1139 N	GLN A 159	41.785	33.872	99.662	1.00	4.25
	ATOM 1140 CA	GLN A 159	40.867	34.463	100.622	1.00	2.75
	ATOM 1141 C	GLN A 159	39.954	33.431	101.261	1.00	4.94
	ATOM 1142 O	GLN A 159	39.830	33.387	102.477	1.00	19.19
20	ATOM 1143 CB	GLN A 159	40.003	35.519	99.932	1.00	28.14
	ATOM 1144 CG	GLN A 159	39.821	36.787	100.726	1.00	54.88
	ATOM 1145 CD	GLN A 159	41.157	37.484	101.008	1.00	61.13
	ATOM 1146 OE1	GLN A 159	41.462	37.831	102.151	1.00	68.29
	ATOM 1147 NE2	GLN A 159	41.959	37.678	99.968	1.00	58.08
25	ATOM 1148 N	SER A 160	39.294	32.616	100.449	1.00	4.79

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	ATOM 1149	CA	SER A 160	38.396	31.599	100.981	1.00	9.49
	ATOM 1150	C	SER A 160	39.168	30.622	101.863	1.00	11.81
	ATOM 1151	O	SER A 160	38.721	30.236	102.941	1.00	20.25
	ATOM 1152	CB	SER A 160	37.689	30.863	99.836	1.00	2.00
5	ATOM 1153	OG	SER A 160	36.984	31.788	99.018	1.00	36.41
	ATOM 1154	N	PHE A 161	40.356	30.255	101.413	1.00	9.10
	ATOM 1155	CA	PHE A 161	41.204	29.331	102.146	1.00	2.00
	ATOM 1156	C	PHE A 161	41.564	29.877	103.519	1.00	14.61
	ATOM 1157	O	PHE A 161	41.570	29.146	104.504	1.00	21.27
10	ATOM 1158	CB	PHE A 161	42.472	29.110	101.352	1.00	2.34
	ATOM 1159	CG	PHE A 161	43.439	28.195	101.998	1.00	2.40
	ATOM 1160	CD1	PHE A 161	43.230	26.826	101.975	1.00	5.05
	ATOM 1161	CD2	PHE A 161	44.587	28.691	102.586	1.00	2.36
	ATOM 1162	CE1	PHE A 161	44.157	25.972	102.526	1.00	2.00
15	ATOM 1163	CE2	PHE A 161	45.523	27.828	103.142	1.00	9.44
	ATOM 1164	CZ	PHE A 161	45.307	26.475	103.111	1.00	2.00
	ATOM 1165	N	LEU A 162	41.873	31.163	103.588	1.00	12.73
	ATOM 1166	CA	LEU A 162	42.234	31.761	104.852	1.00	2.79
	ATOM 1167	C	LEU A 162	41.041	31.988	105.782	1.00	2.00
20	ATOM 1168	O	LEU A 162	41.215	32.002	106.988	1.00	12.03
	ATOM 1169	CB	LEU A 162	43.028	33.042	104.637	1.00	2.00
	ATOM 1170	CG	LEU A 162	44.374	32.971	103.912	1.00	2.00
	ATOM 1171	CD1	LEU A 162	44.885	34.371	103.769	1.00	7.23
	ATOM 1172	CD2	LEU A 162	45.386	32.109	104.632	1.00	2.00
25	ATOM 1173	N	GLU A 163	39.833	32.147	105.255	1.00	2.00

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		ATOM 1174	CA	GLU A 163	38.683	32.323	106.145	1.00	7.42
		ATOM 1175	C	GLU A 163	38.445	31.039	106.908	1.00	11.65
		ATOM 1176	O	GLU A 163	38.180	31.076	108.100	1.00	26.49
		ATOM 1177	CB	GLU A 163	37.404	32.760	105.411	1.00	2.47
5		ATOM 1178	CG	GLU A 163	37.470	34.199	104.875	1.00	64.66
		ATOM 1179	CD	GLU A 163	36.165	34.688	104.236	1.00	91.84
		ATOM 1180	OE1	GLU A 163	35.899	34.366	103.050	1.00	109.71
		ATOM 1181	OE2	GLU A 163	35.414	35.423	104.915	1.00	109.51
		ATOM 1182	N	VAL A 164	38.576	29.899	106.228	1.00	14.64
10		ATOM 1183	CA	VAL A 164	38.384	28.588	106.869	1.00	3.30
		ATOM 1184	C	VAL A 164	39.522	28.367	107.850	1.00	11.13
		ATOM 1185	O	VAL A 164	39.292	27.978	108.982	1.00	29.02
		ATOM 1186	CB	VAL A 164	38.400	27.415	105.861	1.00	2.00
		ATOM 1187	CG1	VAL A 164	38.029	26.128	106.566	1.00	4.68
15		ATOM 1188	CG2	VAL A 164	37.473	27.678	104.703	1.00	2.00
		ATOM 1189	N	SER A 165	40.753	28.588	107.400	1.00	12.92
		ATOM 1190	CA	SER A 165	41.929	28.445	108.255	1.00	8.74
		ATOM 1191	C	SER A 165	41.767	29.257	109.548	1.00	9.69
		ATOM 1192	O	SER A 165	42.047	28.774	110.643	1.00	13.67
20		ATOM 1193	CB	SER A 165	43.184	28.928	107.519	1.00	2.00
		ATOM 1194	OG	SER A 165	43.474	28.117	106.407	1.00	15.63
		ATOM 1195	N	TYR A 166	41.310	30.493	109.417	1.00	9.41
		ATOM 1196	CA	TYR A 166	41.103	31.342	110.569	1.00	2.00
		ATOM 1197	C	TYR A 166	40.191	30.628	111.565	1.00	4.05
25		ATOM 1198	O	TYR A 166	40.519	30.546	112.728	1.00	16.58

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		ATOM 1199	CB	TYR	A	166	40.482	32.664	110.139	1.00	3.13
		ATOM 1200	CG	TYR	A	166	40.613	33.708	111.179	1.00	11.65
		ATOM 1201	CD1	TYR	A	166	41.823	34.351	111.373	1.00	12.35
		ATOM 1202	CD2	TYR	A	166	39.559	34.003	112.030	1.00	19.59
5		ATOM 1203	CE1	TYR	A	166	41.992	35.255	112.389	1.00	20.73
		ATOM 1204	CE2	TYR	A	166	39.714	34.908	113.057	1.00	18.33
		ATOM 1205	CZ	TYR	A	166	40.940	35.532	113.237	1.00	24.45
		ATOM 1206	OH	TYR	A	166	41.147	36.395	114.295	1.00	36.48
		ATOM 1207	N	ARG	A	167	39.074	30.072	111.108	1.00	11.88
10		ATOM 1208	CA	ARG	A	167	38.164	29.371	112.019	1.00	15.53
		ATOM 1209	C	ARG	A	167	38.815	28.148	112.640	1.00	16.86
		ATOM 1210	O	ARG	A	167	38.691	27.924	113.844	1.00	42.14
		ATOM 1211	CB	ARG	A	167	36.822	28.973	111.375	1.00	21.47
		ATOM 1212	CG	ARG	A	167	35.951	30.136	110.835	1.00	54.06
15		ATOM 1213	CD	ARG	A	167	35.909	31.395	111.712	1.00	81.51
		ATOM 1214	NE	ARG	A	167	35.248	31.209	113.006	1.00	105.26
		ATOM 1215	CZ	ARG	A	167	34.932	32.204	113.839	1.00	116.88
		ATOM 1216	NH1	ARG	A	167	35.206	33.465	113.518	1.00	128.12
		ATOM 1217	NH2	ARG	A	167	34.354	31.939	115.006	1.00	121.01
20		ATOM 1218	N	VAL	A	168	39.528	27.369	111.844	1.00	11.68
		ATOM 1219	CA	VAL	A	168	40.202	26.184	112.357	1.00	12.24
		ATOM 1220	C	VAL	A	168	41.196	26.588	113.447	1.00	16.61
		ATOM 1221	O	VAL	A	168	41.123	26.097	114.574	1.00	29.91
		ATOM 1222	CB	VAL	A	168	40.933	25.442	111.225	1.00	12.63
25		ATOM 1223	CG1	VAL	A	168	41.788	24.335	111.777	1.00	15.93

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	ATOM	1224	CG2	VAL	A	168	39.919	24.888	110.229	1.00	22.37
	ATOM	1225	N	LEU	A	169	42.091	27.515	113.129	1.00	17.10
	ATOM	1226	CA	LEU	A	169	43.090	27.973	114.096	1.00	19.03
	ATOM	1227	C	LEU	A	169	42.453	28.617	115.331	1.00	20.48
5	ATOM	1228	O	LEU	A	169	42.791	28.258	116.451	1.00	38.55
	ATOM	1229	CB	LEU	A	169	44.091	28.937	113.436	1.00	5.52
	ATOM	1230	CG	LEU	A	169	44.952	28.345	112.308	1.00	7.29
	ATOM	1231	CD1	LEU	A	169	45.766	29.422	111.604	1.00	2.00
	ATOM	1232	CD2	LEU	A	169	45.864	27.283	112.877	1.00	2.88
10	ATOM	1233	N	ARG	A	170	41.473	29.495	115.134	1.00	22.56
	ATOM	1234	CA	ARG	A	170	40.805	30.176	116.253	1.00	16.37
	ATOM	1235	C	ARG	A	170	40.302	29.155	117.257	1.00	18.60
	ATOM	1236	O	ARG	A	170	40.367	29.363	118.460	1.00	40.52
	ATOM	1237	CB	ARG	A	170	39.626	31.046	115.766	1.00	10.05
15	ATOM	1238	CG	ARG	A	170	39.344	32.279	116.649	1.00	46.09
	ATOM	1239	CD	ARG	A	170	38.295	33.229	116.047	1.00	75.33
	ATOM	1240	NE	ARG	A	170	38.314	34.542	116.703	1.00	103.96
	ATOM	1241	CZ	ARG	A	170	37.627	35.611	116.296	1.00	115.73
	ATOM	1242	NH1	ARG	A	170	36.845	35.547	115.224	1.00	122.72
20	ATOM	1243	NH2	ARG	A	170	37.736	36.761	116.953	1.00	122.26
	ATOM	1244	N	HIS	A	171	39.814	28.042	116.744	1.00	20.76
	ATOM	1245	CA	HIS	A	171	39.290	26.964	117.551	1.00	23.29
	ATOM	1246	C	HIS	A	171	40.418	26.302	118.343	1.00	27.02
	ATOM	1247	O	HIS	A	171	40.344	26.193	119.561	1.00	44.87
25	ATOM	1248	CB	HIS	A	171	38.570	25.974	116.627	1.00	25.78

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		ATOM 1249	CG	HIS	A	171	38.233	24.668	117.268	1.00	58.64
		ATOM 1250	ND1	HIS	A	171	37.225	24.533	118.197	1.00	75.10
		ATOM 1251	CD2	HIS	A	171	38.757	23.430	117.098	1.00	67.55
		ATOM 1252	CE1	HIS	A	171	37.139	23.267	118.570	1.00	80.56
5		ATOM 1253	NE2	HIS	A	171	38.057	22.577	117.917	1.00	72.43
		ATOM 1254	N	LEU	A	172	41.461	25.864	117.654	1.00	26.91
		ATOM 1255	CA	LEU	A	172	42.600	25.233	118.311	1.00	26.65
		ATOM 1256	C	LEU	A	172	43.174	26.098	119.438	1.00	34.15
		ATOM 1257	O	LEU	A	172	43.646	25.576	120.444	1.00	38.59
10		ATOM 1258	CB	LEU	A	172	43.699	24.962	117.286	1.00	13.46
		ATOM 1259	CG	LEU	A	172	43.379	23.965	116.169	1.00	15.33
		ATOM 1260	CD1	LEU	A	172	44.622	23.610	115.356	1.00	16.24
		ATOM 1261	CD2	LEU	A	172	42.845	22.717	116.798	1.00	23.54
		ATOM 1262	N	ALA	A	173	43.139	27.414	119.255	1.00	46.34
15		ATOM 1263	CA	ALA	A	173	43.654	28.350	120.246	1.00	70.42
		ATOM 1264	C	ALA	A	173	42.934	28.253	121.590	1.00	87.76
		ATOM 1265	O	ALA	A	173	43.455	28.678	122.614	1.00	88.98
		ATOM 1266	CB	ALA	A	173	43.614	29.760	119.708	1.00	68.96
		ATOM 1267	N	GLN	A	174	41.769	27.623	121.610	1.00	114.74
20		ATOM 1268	CA	GLN	A	174	41.067	27.450	122.868	1.00	143.74
		ATOM 1269	C	GLN	A	174	40.551	26.012	123.038	1.00	162.37
		ATOM 1270	O	GLN	A	174	39.398	25.716	122.716	1.00	162.97
		ATOM 1271	CB	GLN	A	174	39.943	28.481	123.011	1.00	148.29
		ATOM 1272	CG	GLN	A	174	39.365	28.572	124.426	1.00	156.87
25		ATOM 1273	CD	GLN	A	174	40.420	28.857	125.488	1.00	157.62

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	ATOM 1274	OE1	GLN	A	174	40.854	29.996	125.656	1.00	160.91
	ATOM 1275	NE2	GLN	A	174	40.831	27.822	126.214	1.00	157.15
	ATOM 1276	N	PRO	A	175	41.438	25.084	123.457	1.00	180.07
	ATOM 1277	CA	PRO	A	175	41.107	23.672	123.676	1.00	189.69
5	ATOM 1278	C	PRO	A	175	40.949	23.341	125.172	1.00	194.87
	ATOM 1279	O	PRO	A	175	40.766	24.282	125.980	1.00	198.62
	ATOM 1280	CB	PRO	A	175	42.316	22.964	123.078	1.00	192.32
	ATOM 1281	CG	PRO	A	175	43.436	23.828	123.561	1.00	193.57
	ATOM 1282	CD	PRO	A	175	42.905	25.260	123.421	1.00	188.33
10	ATOM 1283	OXT	PRO	A	175	41.021	22.143	125.525	1.00	195.91
	ATOM 1284	N	ALA	B	1	97.202	57.135	118.771	1.00	79.13
	ATOM 1285	CA	ALA	B	1	97.368	55.819	119.464	1.00	82.13
	ATOM 1286	C	ALA	B	1	96.516	54.750	118.767	1.00	78.33
	ATOM 1287	O	ALA	B	1	96.107	54.937	117.610	1.00	83.46
15	ATOM 1288	CB	ALA	B	1	96.983	55.939	120.952	1.00	80.62
	ATOM 1289	N	GLY	B	2	96.258	53.643	119.464	1.00	65.66
	ATOM 1290	CA	GLY	B	2	95.452	52.575	118.897	1.00	47.69
	ATOM 1291	C	GLY	B	2	95.152	51.461	119.885	1.00	37.94
	ATOM 1292	O	GLY	B	2	96.043	50.961	120.564	1.00	40.96
20	ATOM 1293	N	TYR	B	3	93.885	51.105	120.023	1.00	25.20
	ATOM 1294	CA	TYR	B	3	93.521	50.026	120.926	1.00	22.96
	ATOM 1295	C	TYR	B	3	92.627	49.042	120.163	1.00	26.76
	ATOM 1296	O	TYR	B	3	92.032	49.396	119.141	1.00	30.56
	ATOM 1297	CB	TYR	B	3	92.780	50.562	122.144	1.00	15.59
25	ATOM 1298	CG	TYR	B	3	93.448	51.733	122.858	1.00	33.33

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		ATOM 1299	CD1	TYR	B	3	94.149	51.540	124.055	1.00	33.41
		ATOM 1300	CD2	TYR	B	3	93.299	53.043	122.395	1.00	37.98
		ATOM 1301	CE1	TYR	B	3	94.672	52.617	124.781	1.00	30.14
		ATOM 1302	CE2	TYR	B	3	93.821	54.128	123.111	1.00	39.87
5		ATOM 1303	CZ	TYR	B	3	94.501	53.904	124.307	1.00	45.02
		ATOM 1304	OH	TYR	B	3	94.984	54.967	125.045	1.00	49.47
		ATOM 1305	N	PRO	B	4	92.645	47.763	120.547	1.00	21.92
		ATOM 1306	CA	PRO	B	4	91.801	46.788	119.858	1.00	26.43
		ATOM 1307	C	PRO	B	4	90.359	46.959	120.372	1.00	35.65
10		ATOM 1308	O	PRO	B	4	90.150	47.389	121.518	1.00	41.22
		ATOM 1309	CB	PRO	B	4	92.408	45.463	120.294	1.00	26.45
		ATOM 1310	CG	PRO	B	4	92.898	45.764	121.673	1.00	32.13
		ATOM 1311	CD	PRO	B	4	93.565	47.093	121.477	1.00	24.27
		ATOM 1312	N	PRO	B	5	89.353	46.628	119.533	1.00	29.50
15		ATOM 1313	CA	PRO	B	5	87.906	46.707	119.777	1.00	16.32
		ATOM 1314	C	PRO	B	5	87.356	46.087	121.040	1.00	17.44
		ATOM 1315	O	PRO	B	5	87.827	45.052	121.499	1.00	37.00
		ATOM 1316	CB	PRO	B	5	87.326	45.988	118.574	1.00	17.61
		ATOM 1317	CG	PRO	B	5	88.256	46.310	117.540	1.00	23.27
20		ATOM 1318	CD	PRO	B	5	89.597	46.103	118.185	1.00	27.51
		ATOM 1319	N	ALA	B	6	86.307	46.705	121.567	1.00	18.45
		ATOM 1320	CA	ALA	B	6	85.643	46.210	122.759	1.00	13.08
		ATOM 1321	C	ALA	B	6	84.378	45.510	122.289	1.00	20.42
		ATOM 1322	O	ALA	B	6	83.778	45.913	121.288	1.00	24.31
25		ATOM 1323	CB	ALA	B	6	85.290	47.353	123.663	1.00	4.09

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	ATOM 1324 N	SER B	7	84.005	44.438	122.972	1.00	12.88
	ATOM 1325 CA	SER B	7	82.806	43.700	122.634	1.00	18.06
	ATOM 1326 C	SER B	7	81.586	44.592	122.877	1.00	25.84
	ATOM 1327 O	SER B	7	81.359	45.059	124.002	1.00	43.02
5	ATOM 1328 CB	SER B	7	82.717	42.432	123.484	1.00	23.32
	ATOM 1329 OG	SER B	7	83.778	41.536	123.171	1.00	53.55
	ATOM 1330 N	PRO B	8	80.835	44.902	121.806	1.00	12.26
	ATOM 1331 CA	PRO B	8	79.637	45.730	121.818	1.00	2.00
	ATOM 1332 C	PRO B	8	78.595	45.292	122.832	1.00	10.21
10	ATOM 1333 O	PRO B	8	78.491	44.099	123.142	1.00	25.62
	ATOM 1334 CB	PRO B	8	79.151	45.590	120.393	1.00	2.00
	ATOM 1335 CG	PRO B	8	80.453	45.616	119.631	1.00	2.00
	ATOM 1336 CD	PRO B	8	81.215	44.595	120.416	1.00	12.49
	ATOM 1337 N	SER B	9	77.834	46.255	123.365	1.00	13.12
15	ATOM 1338 CA	SER B	9	76.800	45.961	124.365	1.00	17.84
	ATOM 1339 C	SER B	9	75.486	46.675	124.059	1.00	18.66
	ATOM 1340 O	SER B	9	75.399	47.388	123.064	1.00	23.57
	ATOM 1341 CB	SER B	9	77.293	46.294	125.793	1.00	29.65
	ATOM 1342 OG	SER B	9	77.667	47.662	125.976	1.00	26.55
20	ATOM 1343 N	ASN B	10	74.502	46.526	124.952	1.00	29.83
	ATOM 1344 CA	ASN B	10	73.150	47.116	124.829	1.00	29.98
	ATOM 1345 C	ASN B	10	72.652	47.024	123.375	1.00	23.78
	ATOM 1346 O	ASN B	10	72.231	48.015	122.776	1.00	27.27
	ATOM 1347 CB	ASN B	10	73.057	48.571	125.414	1.00	41.03
25	ATOM 1348 CG	ASN B	10	71.603	48.965	125.869	1.00	55.06

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		ATOM 1349	OD1	ASN	B	10	70.742	48.079	125.914	1.00	61.34
		ATOM 1350	ND2	ASN	B	10	71.347	50.241	126.246	1.00	69.56
		ATOM 1351	N	LEU	B	11	72.768	45.826	122.798	1.00	7.84
		ATOM 1352	CA	LEU	B	11	72.292	45.582	121.437	1.00	10.19
5		ATOM 1353	C	LEU	B	11	70.789	45.362	121.515	1.00	16.24
		ATOM 1354	O	LEU	B	11	70.322	44.537	122.316	1.00	18.28
		ATOM 1355	CB	LEU	B	11	72.942	44.331	120.844	1.00	9.18
		ATOM 1356	CG	LEU	B	11	72.413	43.725	119.525	1.00	9.67
		ATOM 1357	CD1	LEU	B	11	72.856	44.498	118.334	1.00	2.00
10		ATOM 1358	CD2	LEU	B	11	72.910	42.312	119.372	1.00	3.80
		ATOM 1359	N	SER	B	12	70.035	46.101	120.700	1.00	11.17
		ATOM 1360	CA	SER	B	12	68.585	45.979	120.685	1.00	4.38
		ATOM 1361	C	SER	B	12	68.113	46.094	119.252	1.00	6.83
		ATOM 1362	O	SER	B	12	68.792	46.639	118.379	1.00	5.31
15		ATOM 1363	CB	SER	B	12	67.941	47.070	121.543	1.00	4.38
		ATOM 1364	OG	SER	B	12	67.999	48.333	120.907	1.00	17.63
		ATOM 1365	N	CYS	B	13	66.929	45.587	119.007	1.00	8.70
		ATOM 1366	CA	CYS	B	13	66.402	45.666	117.682	1.00	6.48
		ATOM 1367	C	CYS	B	13	64.940	45.973	117.797	1.00	11.15
20		ATOM 1368	O	CYS	B	13	64.297	45.642	118.791	1.00	12.15
		ATOM 1369	CB	CYS	B	13	66.596	44.343	116.984	1.00	5.46
		ATOM 1370	SG	CYS	B	13	68.338	43.903	116.795	1.00	22.98
		ATOM 1371	N	LEU	B	14	64.431	46.666	116.801	1.00	2.00
		ATOM 1372	CA	LEU	B	14	63.041	46.991	116.768	1.00	2.00
25		ATOM 1373	C	LEU	B	14	62.648	46.805	115.336	1.00	2.83

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	ATOM 1374 O	LEU B	14	63.409	47.153	114.445	1.00	7.05
	ATOM 1375 CB	LEU B	14	62.822	48.437	117.163	1.00	2.00
	ATOM 1376 CG	LEU B	14	62.904	48.746	118.645	1.00	6.95
	ATOM 1377 CD1	LEU B	14	62.556	50.170	118.775	1.00	9.62
5	ATOM 1378 CD2	LEU B	14	61.945	47.881	119.464	1.00	12.36
	ATOM 1379 N	MET B	15	61.455	46.268	115.125	1.00	10.89
	ATOM 1380 CA	MET B	15	60.905	46.039	113.800	1.00	3.01
	ATOM 1381 C	MET B	15	60.102	47.260	113.390	1.00	11.11
	ATOM 1382 O	MET B	15	59.144	47.631	114.070	1.00	18.12
10	ATOM 1383 CB	MET B	15	59.989	44.820	113.828	1.00	11.90
	ATOM 1384 CG	MET B	15	59.487	44.405	112.474	1.00	2.00
	ATOM 1385 SD	MET B	15	60.760	43.923	111.345	1.00	18.17
	ATOM 1386 CE	MET B	15	59.864	43.994	109.867	1.00	16.72
	ATOM 1387 N	HIS B	16	60.502	47.902	112.299	1.00	5.12
15	ATOM 1388 CA	HIS B	16	59.796	49.082	111.839	1.00	2.00
	ATOM 1389 C	HIS B	16	58.832	48.737	110.744	1.00	3.16
	ATOM 1390 O	HIS B	16	59.243	48.307	109.674	1.00	13.51
	ATOM 1391 CB	HIS B	16	60.782	50.102	111.345	1.00	6.95
	ATOM 1392 CG	HIS B	16	61.405	50.898	112.439	1.00	13.78
20	ATOM 1393 ND1	HIS B	16	62.410	50.406	113.236	1.00	18.09
	ATOM 1394 CD2	HIS B	16	61.136	52.140	112.895	1.00	25.43
	ATOM 1395 CE1	HIS B	16	62.735	51.307	114.143	1.00	17.81
	ATOM 1396 NE2	HIS B	16	61.974	52.368	113.958	1.00	30.01
	ATOM 1397 N	LEU B	17	57.545	48.892	111.010	1.00	5.20
25	ATOM 1398 CA	LEU B	17	56.517	48.565	110.019	1.00	2.00

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5	ATOM 1399	C	LEU	B	17	56.434	49.576	108.897	1.00	5.01
	ATOM 1400	O	LEU	B	17	55.940	49.274	107.822	1.00	11.17
	ATOM 1401	CB	LEU	B	17	55.154	48.439	110.682	1.00	2.00
	ATOM 1402	CG	LEU	B	17	55.044	47.365	111.751	1.00	8.19
	ATOM 1403	CD1	LEU	B	17	53.602	47.204	112.172	1.00	2.00
10	ATOM 1404	CD2	LEU	B	17	55.553	46.077	111.194	1.00	2.00
	ATOM 1405	N	THR	B	18	56.912	50.783	109.173	1.00	15.40
	ATOM 1406	CA	THR	B	18	56.914	51.873	108.210	1.00	17.74
	ATOM 1407	C	THR	B	18	57.870	51.548	107.064	1.00	22.84
	ATOM 1408	O	THR	B	18	57.505	51.610	105.890	1.00	33.18
15	ATOM 1409	CB	THR	B	18	57.329	53.230	108.904	1.00	24.82
	ATOM 1410	OG1	THR	B	18	58.337	53.008	109.907	1.00	31.53
	ATOM 1411	CG2	THR	B	18	56.137	53.867	109.582	1.00	38.02
	ATOM 1412	N	THR	B	19	59.075	51.124	107.435	1.00	19.55
	ATOM 1413	CA	THR	B	19	60.135	50.800	106.498	1.00	7.26
20	ATOM 1414	C	THR	B	19	60.225	49.305	106.229	1.00	9.49
	ATOM 1415	O	THR	B	19	60.900	48.863	105.301	1.00	15.57
	ATOM 1416	CB	THR	B	19	61.470	51.325	107.037	1.00	6.15
	ATOM 1417	OG1	THR	B	19	61.790	50.689	108.281	1.00	29.99
	ATOM 1418	CG2	THR	B	19	61.381	52.801	107.301	1.00	29.79
25	ATOM 1419	N	ASN	B	20	59.538	48.534	107.059	1.00	15.78
	ATOM 1420	CA	ASN	B	20	59.508	47.082	106.949	1.00	21.18
	ATOM 1421	C	ASN	B	20	60.940	46.537	106.975	1.00	20.99
	ATOM 1422	O	ASN	B	20	61.438	45.943	106.009	1.00	20.73
	ATOM 1423	CB	ASN	B	20	58.740	46.662	105.685	1.00	13.28

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	ATOM 1424	CG	ASN B	20	57.944	45.377	105.873	1.00	31.24
	ATOM 1425	OD1	ASN B	20	57.749	44.630	104.911	1.00	43.34
	ATOM 1426	ND2	ASN B	20	57.456	45.123	107.097	1.00	24.41
	ATOM 1427	N	SER B	21	61.620	46.798	108.085	1.00	21.35
5	ATOM 1428	CA	SER B	21	62.989	46.345	108.270	1.00	11.63
	ATOM 1429	C	SER B	21	63.296	46.320	109.741	1.00	8.43
	ATOM 1430	O	SER B	21	62.742	47.105	110.510	1.00	15.83
	ATOM 1431	CB	SER B	21	63.955	47.281	107.566	1.00	12.26
	ATOM 1432	OG	SER B	21	63.808	48.607	108.056	1.00	25.96
10	ATOM 1433	N	LEU B	22	64.150	45.389	110.128	1.00	11.35
	ATOM 1434	CA	LEU B	22	64.566	45.226	111.512	1.00	2.00
	ATOM 1435	C	LEU B	22	65.758	46.132	111.722	1.00	3.65
	ATOM 1436	O	LEU B	22	66.746	46.047	111.018	1.00	13.98
	ATOM 1437	CB	LEU B	22	64.965	43.782	111.769	1.00	2.00
15	ATOM 1438	CG	LEU B	22	65.298	43.493	113.199	1.00	2.00
	ATOM 1439	CD1	LEU B	22	64.060	43.592	113.993	1.00	2.00
	ATOM 1440	CD2	LEU B	22	65.838	42.136	113.305	1.00	2.00
	ATOM 1441	N	VAL B	23	65.637	47.050	112.652	1.00	5.28
	ATOM 1442	CA	VAL B	23	66.716	47.958	112.916	1.00	7.00
20	ATOM 1443	C	VAL B	23	67.347	47.664	114.253	1.00	9.46
	ATOM 1444	O	VAL B	23	66.683	47.610	115.293	1.00	11.57
	ATOM 1445	CB	VAL B	23	66.239	49.386	112.867	1.00	17.32
	ATOM 1446	CG1	VAL B	23	67.374	50.326	113.233	1.00	10.21
	ATOM 1447	CG2	VAL B	23	65.715	49.686	111.491	1.00	9.59
25	ATOM 1448	N	CYS B	24	68.655	47.495	114.207	1.00	10.43

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5	ATOM 1449	CA	CYS	B	24	69.420	47.173	115.381	1.00	8.65
	ATOM 1450	C	CYS	B	24	70.469	48.220	115.653	1.00	8.46
	ATOM 1451	O	CYS	B	24	71.101	48.729	114.739	1.00	18.63
	ATOM 1452	CB	CYS	B	24	70.061	45.815	115.177	1.00	8.25
	ATOM 1453	SG	CYS	B	24	68.821	44.509	114.916	1.00	26.49
10	ATOM 1454	N	GLN	B	25	70.621	48.568	116.920	1.00	9.18
	ATOM 1455	CA	GLN	B	25	71.598	49.557	117.341	1.00	12.92
	ATOM 1456	C	GLN	B	25	72.381	48.953	118.498	1.00	20.53
	ATOM 1457	O	GLN	B	25	71.890	48.049	119.187	1.00	20.05
	ATOM 1458	CB	GLN	B	25	70.906	50.853	117.773	1.00	19.02
15	ATOM 1459	CG	GLN	B	25	69.782	50.683	118.795	1.00	37.09
	ATOM 1460	CD	GLN	B	25	69.013	51.969	119.035	1.00	45.12
	ATOM 1461	OE1	GLN	B	25	69.160	52.600	120.072	1.00	59.43
	ATOM 1462	NE2	GLN	B	25	68.190	52.365	118.069	1.00	61.74
	ATOM 1463	N	TRP	B	26	73.592	49.454	118.716	1.00	20.94
20	ATOM 1464	CA	TRP	B	26	74.452	48.940	119.782	1.00	18.55
	ATOM 1465	C	TRP	B	26	75.361	50.033	120.337	1.00	24.25
	ATOM 1466	O	TRP	B	26	75.352	51.160	119.824	1.00	23.37
	ATOM 1467	CB	TRP	B	26	75.323	47.792	119.236	1.00	15.55
	ATOM 1468	CG	TRP	B	26	76.122	48.177	118.001	1.00	14.09
25	ATOM 1469	CD1	TRP	B	26	77.308	48.848	117.969	1.00	2.00
	ATOM 1470	CD2	TRP	B	26	75.729	47.989	116.627	1.00	17.64
	ATOM 1471	NE1	TRP	B	26	77.668	49.109	116.665	1.00	11.85
	ATOM 1472	CE2	TRP	B	26	76.718	48.591	115.824	1.00	11.49
	ATOM 1473	CE3	TRP	B	26	74.634	47.376	116.002	1.00	17.51

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	ATOM 1474	CZ2	TRP	B	26	76.644	48.603	114.429	1.00	17.72
	ATOM 1475	CZ3	TRP	B	26	74.562	47.390	114.614	1.00	16.56
	ATOM 1476	CH2	TRP	B	26	75.563	48.001	113.845	1.00	18.46
	ATOM 1477	N	GLU	B	27	76.148	49.671	121.363	1.00	30.86
5	ATOM 1478	CA	GLU	B	27	77.123	50.551	122.026	1.00	28.42
	ATOM 1479	C	GLU	B	27	78.538	50.018	121.788	1.00	18.40
	ATOM 1480	O	GLU	B	27	78.902	48.982	122.334	1.00	30.26
	ATOM 1481	CB	GLU	B	27	76.864	50.604	123.533	1.00	40.59
	ATOM 1482	CG	GLU	B	27	77.914	51.397	124.324	1.00	72.77
10	ATOM 1483	CD	GLU	B	27	78.099	52.825	123.813	1.00	89.19
	ATOM 1484	OE1	GLU	B	27	77.107	53.585	123.786	1.00	105.09
	ATOM 1485	OE2	GLU	B	27	79.236	53.192	123.435	1.00	97.61
	ATOM 1486	N	PRO	B	28	79.353	50.722	120.979	1.00	6.27
	ATOM 1487	CA	PRO	B	28	80.734	50.298	120.672	1.00	11.66
15	ATOM 1488	C	PRO	B	28	81.814	50.476	121.749	1.00	20.41
	ATOM 1489	O	PRO	B	28	82.906	49.904	121.645	1.00	32.48
	ATOM 1490	CB	PRO	B	28	81.061	51.079	119.392	1.00	11.89
	ATOM 1491	CG	PRO	B	28	80.257	52.357	119.542	1.00	3.23
	ATOM 1492	CD	PRO	B	28	78.942	51.860	120.127	1.00	7.77
20	ATOM 1493	N	GLY	B	29	81.525	51.263	122.776	1.00	19.45
	ATOM 1494	CA	GLY	B	29	82.502	51.465	123.820	1.00	4.66
	ATOM 1495	C	GLY	B	29	83.585	52.429	123.389	1.00	10.71
	ATOM 1496	O	GLY	B	29	83.449	53.123	122.382	1.00	11.63
	ATOM 1497	N	PRO	B	30	84.710	52.436	124.112	1.00	10.52
25	ATOM 1498	CA	PRO	B	30	85.900	53.269	123.929	1.00	2.00

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		ATOM 1499	C	PRO	B	30	86.372	53.472	122.503	1.00	3.04
		ATOM 1500	O	PRO	B	30	86.426	52.518	121.747	1.00	23.78
		ATOM 1501	CB	PRO	B	30	86.922	52.545	124.774	1.00	3.58
		ATOM 1502	CG	PRO	B	30	86.078	52.051	125.958	1.00	2.00
5		ATOM 1503	CD	PRO	B	30	84.908	51.477	125.220	1.00	8.33
		ATOM 1504	N	GLU	B	31	86.704	54.711	122.129	1.00	6.67
		ATOM 1505	CA	GLU	B	31	87.173	54.979	120.772	1.00	21.73
		ATOM 1506	C	GLU	B	31	88.481	54.233	120.643	1.00	22.98
		ATOM 1507	O	GLU	B	31	89.186	54.087	121.631	1.00	27.81
10		ATOM 1508	CB	GLU	B	31	87.370	56.483	120.498	1.00	24.06
		ATOM 1509	CG	GLU	B	31	87.987	56.826	119.096	1.00	54.34
		ATOM 1510	CD	GLU	B	31	87.081	56.532	117.878	1.00	72.22
		ATOM 1511	OE1	GLU	B	31	85.922	57.006	117.862	1.00	84.27
		ATOM 1512	OE2	GLU	B	31	87.542	55.862	116.914	1.00	65.63
15		ATOM 1513	N	THR	B	32	88.782	53.744	119.437	1.00	28.40
		ATOM 1514	CA	THR	B	32	90.001	52.976	119.163	1.00	17.90
		ATOM 1515	C	THR	B	32	91.102	53.761	118.441	1.00	14.09
		ATOM 1516	O	THR	B	32	92.277	53.487	118.622	1.00	26.66
		ATOM 1517	CB	THR	B	32	89.660	51.676	118.372	1.00	16.07
20		ATOM 1518	OG1	THR	B	32	89.229	51.989	117.036	1.00	33.08
		ATOM 1519	CG2	THR	B	32	88.552	50.938	119.070	1.00	6.80
		ATOM 1520	N	HIS	B	33	90.700	54.744	117.643	1.00	28.52
		ATOM 1521	CA	HIS	B	33	91.596	55.622	116.874	1.00	30.27
		ATOM 1522	C	HIS	B	33	92.016	55.039	115.572	1.00	27.19
25		ATOM 1523	O	HIS	B	33	92.620	55.716	114.739	1.00	35.02

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		ATOM 1524 CB HIS B 33 92.799 56.066 117.686 1.00 26.92
		ATOM 1525 CG HIS B 33 92.444 56.980 118.822 1.00 36.22
		ATOM 1526 ND1 HIS B 33 91.947 58.253 118.625 1.00 29.47
		ATOM 1527 CD2 HIS B 33 92.503 56.801 120.166 1.00 25.09
5		ATOM 1528 CE1 HIS B 33 91.720 58.815 119.801 1.00 41.59
		ATOM 1529 NE2 HIS B 33 92.048 57.954 120.750 1.00 15.25
		ATOM 1530 N LEU B 34 91.533 53.826 115.353 1.00 33.80
		ATOM 1531 CA LEU B 34 91.810 53.071 114.147 1.00 40.13
		ATOM 1532 C LEU B 34 90.550 52.937 113.297 1.00 39.54
10		ATOM 1533 O LEU B 34 89.442 52.970 113.828 1.00 37.54
		ATOM 1534 CB LEU B 34 92.320 51.685 114.544 1.00 27.16
		ATOM 1535 CG LEU B 34 93.674 51.699 115.249 1.00 16.99
		ATOM 1536 CD1 LEU B 34 93.940 50.410 115.986 1.00 14.45
		ATOM 1537 CD2 LEU B 34 94.737 51.964 114.215 1.00 26.70
15		ATOM 1538 N PRO B 35 90.702 52.875 111.959 1.00 42.01
		ATOM 1539 CA PRO B 35 89.555 52.732 111.060 1.00 38.63
		ATOM 1540 C PRO B 35 88.986 51.375 111.437 1.00 39.92
		ATOM 1541 O PRO B 35 89.566 50.325 111.139 1.00 42.11
		ATOM 1542 CB PRO B 35 90.210 52.685 109.687 1.00 36.87
20		ATOM 1543 CG PRO B 35 91.433 53.504 109.872 1.00 42.29
		ATOM 1544 CD PRO B 35 91.946 52.991 111.185 1.00 46.58
		ATOM 1545 N THR B 36 87.877 51.416 112.153 1.00 37.36
		ATOM 1546 CA THR B 36 87.247 50.215 112.664 1.00 36.36
		ATOM 1547 C THR B 36 85.950 49.914 111.899 1.00 31.85
25		ATOM 1548 O THR B 36 85.356 50.836 111.330 1.00 45.61

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		ATOM 1549	CB	THR	B	36	87.068	50.405	114.201	1.00	35.54
		ATOM 1550	OG1	THR	B	36	86.436	49.269	114.781	1.00	24.55
		ATOM 1551	CG2	THR	B	36	86.277	51.670	114.510	1.00	54.43
		ATOM 1552	N	SER	B	37	85.548	48.640	111.823	1.00	21.50
5		ATOM 1553	CA	SER	B	37	84.335	48.270	111.079	1.00	24.28
		ATOM 1554	C	SER	B	37	83.408	47.393	111.876	1.00	24.22
		ATOM 1555	O	SER	B	37	83.861	46.454	112.523	1.00	26.32
		ATOM 1556	CB	SER	B	37	84.686	47.504	109.801	1.00	30.75
		ATOM 1557	OG	SER	B	37	84.851	46.114	110.080	1.00	28.88
10		ATOM 1558	N	PHE	B	38	82.107	47.645	111.756	1.00	26.44
		ATOM 1559	CA	PHE	B	38	81.092	46.852	112.464	1.00	25.56
		ATOM 1560	C	PHE	B	38	80.163	46.139	111.473	1.00	24.07
		ATOM 1561	O	PHE	B	38	79.688	46.742	110.506	1.00	28.88
		ATOM 1562	CB	PHE	B	38	80.242	47.745	113.363	1.00	27.33
15		ATOM 1563	CG	PHE	B	38	81.019	48.503	114.390	1.00	15.77
		ATOM 1564	CD1	PHE	B	38	81.541	49.755	114.090	1.00	14.55
		ATOM 1565	CD2	PHE	B	38	81.197	47.981	115.670	1.00	12.32
		ATOM 1566	CE1	PHE	B	38	82.227	50.480	115.047	1.00	16.67
		ATOM 1567	CE2	PHE	B	38	81.885	48.698	116.641	1.00	10.49
20		ATOM 1568	CZ	PHE	B	38	82.401	49.952	116.325	1.00	15.07
		ATOM 1569	N	ILE	B	39	79.874	44.872	111.725	1.00	13.66
		ATOM 1570	CA	ILE	B	39	79.012	44.120	110.834	1.00	9.34
		ATOM 1571	C	ILE	B	39	77.983	43.408	111.648	1.00	9.91
		ATOM 1572	O	ILE	B	39	78.340	42.640	112.556	1.00	9.65
25		ATOM 1573	CB	ILE	B	39	79.795	43.046	110.076	1.00	13.07

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		ATOM 1574	CG1	ILE	B	39	80.792	43.693	109.125	1.00	17.53
		ATOM 1575	CG2	ILE	B	39	78.856	42.142	109.312	1.00	18.85
		ATOM 1576	CD1	ILE	B	39	81.690	42.676	108.408	1.00	45.12
		ATOM 1577	N	LEU	B	40	76.712	43.683	111.355	1.00	8.92
5		ATOM 1578	CA	LEU	B	40	75.609	43.021	112.047	1.00	12.00
		ATOM 1579	C	LEU	B	40	75.489	41.679	111.346	1.00	18.40
		ATOM 1580	O	LEU	B	40	75.254	41.631	110.136	1.00	19.15
		ATOM 1581	CB	LEU	B	40	74.315	43.802	111.881	1.00	5.15
		ATOM 1582	CG	LEU	B	40	73.146	43.337	112.744	1.00	2.00
10		ATOM 1583	CD1	LEU	B	40	73.502	43.470	114.165	1.00	2.00
		ATOM 1584	CD2	LEU	B	40	71.956	44.182	112.486	1.00	16.71
		ATOM 1585	N	LYS	B	41	75.748	40.607	112.086	1.00	15.55
		ATOM 1586	CA	LYS	B	41	75.705	39.255	111.547	1.00	18.97
		ATOM 1587	C	LYS	B	41	74.532	38.523	112.145	1.00	8.43
15		ATOM 1588	O	LYS	B	41	74.197	38.741	113.293	1.00	17.95
		ATOM 1589	CB	LYS	B	41	77.000	38.472	111.894	1.00	17.62
		ATOM 1590	CG	LYS	B	41	78.248	38.834	111.074	1.00	28.65
		ATOM 1591	CD	LYS	B	41	79.012	37.592	110.642	1.00	38.53
		ATOM 1592	CE	LYS	B	41	80.242	37.952	109.830	1.00	49.39
20		ATOM 1593	NZ	LYS	B	41	80.928	36.733	109.307	1.00	73.31
		ATOM 1594	N	SER	B	42	73.949	37.606	111.391	1.00	11.08
		ATOM 1595	CA	SER	B	42	72.825	36.819	111.892	1.00	9.66
		ATOM 1596	C	SER	B	42	72.519	35.580	111.061	1.00	9.98
		ATOM 1597	O	SER	B	42	72.985	35.425	109.920	1.00	12.58
25		ATOM 1598	CB	SER	B	42	71.557	37.669	111.980	1.00	15.55

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5	ATOM 1599 OG	SER B	42	71.175	38.179	110.713	1.00	31.02
	ATOM 1600 N	PHE B	43	71.738	34.692	111.660	1.00	8.55
	ATOM 1601 CA	PHE B	43	71.300	33.474	111.008	1.00	13.23
	ATOM 1602 C	PHE B	43	69.932	33.080	111.546	1.00	15.45
	ATOM 1603 O	PHE B	43	69.582	33.419	112.678	1.00	20.62
10	ATOM 1604 CB	PHE B	43	72.337	32.331	111.142	1.00	5.59
	ATOM 1605 CG	PHE B	43	72.616	31.865	112.562	1.00	5.28
	ATOM 1606 CD1	PHE B	43	71.797	30.930	113.182	1.00	15.72
	ATOM 1607 CD2	PHE B	43	73.729	32.336	113.266	1.00	16.65
	ATOM 1608 CE1	PHE B	43	72.073	30.474	114.477	1.00	16.87
15	ATOM 1609 CE2	PHE B	43	74.012	31.886	114.560	1.00	12.21
	ATOM 1610 CZ	PHE B	43	73.184	30.956	115.165	1.00	4.28
	ATOM 1611 N	ARG B	44	69.103	32.481	110.703	1.00	19.89
	ATOM 1612 CA	ARG B	44	67.780	32.038	111.152	1.00	20.65
	ATOM 1613 C	ARG B	44	68.004	30.860	112.097	1.00	14.55
20	ATOM 1614 O	ARG B	44	68.911	30.071	111.892	1.00	20.60
	ATOM 1615 CB	ARG B	44	66.907	31.618	109.961	1.00	24.89
	ATOM 1616 CG	ARG B	44	66.672	32.738	108.960	1.00	38.57
	ATOM 1617 CD	ARG B	44	65.835	32.335	107.763	1.00	38.58
	ATOM 1618 NE	ARG B	44	65.910	33.353	106.714	1.00	52.14
25	ATOM 1619 CZ	ARG B	44	65.306	33.268	105.531	1.00	67.06
	ATOM 1620 NH1	ARG B	44	64.561	32.205	105.222	1.00	67.15
	ATOM 1621 NH2	ARG B	44	65.462	34.245	104.641	1.00	78.07
	ATOM 1622 N	SER B	45	67.193	30.746	113.134	1.00	9.81
	ATOM 1623 CA	SER B	45	67.340	29.675	114.108	1.00	2.00

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		ATOM 1624	C	SER B	45	65.949	29.220	114.530	1.00	8.08
		ATOM 1625	O	SER B	45	65.016	29.282	113.729	1.00	20.15
		ATOM 1626	CB	SER B	45	68.137	30.204	115.300	1.00	12.56
		ATOM 1627	OG	SER B	45	68.321	29.248	116.322	1.00	15.30
5		ATOM 1628	N	ARG B	46	65.814	28.714	115.751	1.00	6.39
		ATOM 1629	CA	ARG B	46	64.529	28.249	116.292	1.00	14.71
		ATOM 1630	C	ARG B	46	64.534	28.843	117.677	1.00	14.76
		ATOM 1631	O	ARG B	46	65.507	29.490	118.038	1.00	18.62
		ATOM 1632	CB	ARG B	46	64.470	26.714	116.416	1.00	20.61
10		ATOM 1633	CG	ARG B	46	64.428	25.942	115.117	1.00	18.16
		ATOM 1634	CD	ARG B	46	63.037	25.381	114.841	1.00	64.07
		ATOM 1635	NE	ARG B	46	63.060	24.322	113.827	1.00	83.60
		ATOM 1636	CZ	ARG B	46	63.478	23.073	114.048	1.00	88.20
		ATOM 1637	NH1	ARG B	46	63.911	22.707	115.250	1.00	80.43
15		ATOM 1638	NH2	ARG B	46	63.477	22.187	113.058	1.00	91.66
		ATOM 1639	N	ALA B	47	63.484	28.627	118.466	1.00	19.67
		ATOM 1640	CA	ALA B	47	63.462	29.188	119.818	1.00	19.52
		ATOM 1641	C	ALA B	47	64.725	28.771	120.585	1.00	21.60
		ATOM 1642	O	ALA B	47	65.303	27.716	120.312	1.00	27.59
20		ATOM 1643	CB	ALA B	47	62.208	28.749	120.559	1.00	18.79
		ATOM 1644	N	ASP B	48	65.169	29.622	121.508	1.00	32.86
		ATOM 1645	CA	ASP B	48	66.369	29.382	122.325	1.00	32.37
		ATOM 1646	C	ASP B	48	67.652	29.509	121.508	1.00	28.85
		ATOM 1647	O	ASP B	48	68.751	29.436	122.043	1.00	27.70
25		ATOM 1648	CB	ASP B	48	66.321	28.017	123.026	1.00	51.60

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		ATOM 1649	CG	ASP	B	48	65.081	27.842	123.901	1.00	68.98
		ATOM 1650	OD1	ASP	B	48	64.386	28.845	124.189	1.00	69.44
		ATOM 1651	OD2	ASP	B	48	64.798	26.686	124.294	1.00	81.70
		ATOM 1652	N	CYS	B	49	67.492	29.763	120.217	1.00	30.90
5		ATOM 1653	CA	CYS	B	49	68.600	29.938	119.279	1.00	43.16
		ATOM 1654	C	CYS	B	49	69.721	28.909	119.320	1.00	50.25
		ATOM 1655	O	CYS	B	49	70.876	29.222	119.013	1.00	55.35
		ATOM 1656	CB	CYS	B	49	69.168	31.367	119.343	1.00	51.43
		ATOM 1657	SG	CYS	B	49	68.108	32.674	118.599	1.00	43.00
10		ATOM 1658	N	GLN	B	50	69.377	27.677	119.678	1.00	54.42
		ATOM 1659	CA	GLN	B	50	70.361	26.605	119.708	1.00	48.25
		ATOM 1660	C	GLN	B	50	70.556	26.151	118.264	1.00	45.48
		ATOM 1661	O	GLN	B	50	71.682	26.014	117.790	1.00	45.29
		ATOM 1662	CB	GLN	B	50	69.876	25.450	120.587	1.00	50.17
15		ATOM 1663	CG	GLN	B	50	70.060	25.685	122.086	1.00	73.15
		ATOM 1664	CD	GLN	B	50	71.530	25.709	122.503	1.00	88.48
		ATOM 1665	OE1	GLN	B	50	72.208	26.738	122.400	1.00	85.46
		ATOM 1666	NE2	GLN	B	50	72.029	24.567	122.977	1.00	94.08
		ATOM 1667	N	TYR	B	51	69.445	26.015	117.544	1.00	41.68
20		ATOM 1668	CA	TYR	B	51	69.441	25.576	116.147	1.00	39.12
		ATOM 1669	C	TYR	B	51	70.163	26.540	115.183	1.00	36.01
		ATOM 1670	O	TYR	B	51	69.717	27.658	114.971	1.00	40.72
		ATOM 1671	CB	TYR	B	51	67.987	25.364	115.707	1.00	42.68
		ATOM 1672	CG	TYR	B	51	67.813	24.742	114.339	1.00	50.14
25		ATOM 1673	CD1	TYR	B	51	67.438	23.402	114.204	1.00	49.93

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	ATOM 1674	CD2	TYR	B	51	68.021	25.490	113.179	1.00	45.62
	ATOM 1675	CE1	TYR	B	51	67.276	22.826	112.948	1.00	59.33
	ATOM 1676	CE2	TYR	B	51	67.866	24.925	111.923	1.00	53.69
	ATOM 1677	CZ	TYR	B	51	67.493	23.594	111.807	1.00	60.82
5	ATOM 1678	OH	TYR	B	51	67.340	23.042	110.549	1.00	68.36
	ATOM 1679	N	GLN	B	52	71.218	26.065	114.525	1.00	33.77
	ATOM 1680	CA	GLN	B	52	72.006	26.893	113.602	1.00	35.26
	ATOM 1681	C	GLN	B	52	71.477	26.865	112.150	1.00	27.92
	ATOM 1682	O	GLN	B	52	72.058	26.222	111.291	1.00	31.12
10	ATOM 1683	CB	GLN	B	52	73.490	26.443	113.661	1.00	49.22
	ATOM 1684	CG	GLN	B	52	74.567	27.553	113.822	1.00	63.45
	ATOM 1685	CD	GLN	B	52	75.022	27.822	115.273	1.00	79.55
	ATOM 1686	OE1	GLN	B	52	75.935	28.626	115.506	1.00	89.60
	ATOM 1687	NE2	GLN	B	52	74.386	27.165	116.243	1.00	79.24
15	ATOM 1688	N	GLY	B	53	70.394	27.587	111.876	1.00	26.85
	ATOM 1689	CA	GLY	B	53	69.815	27.622	110.534	1.00	6.57
	ATOM 1690	C	GLY	B	53	70.555	28.451	109.495	1.00	14.76
	ATOM 1691	O	GLY	B	53	71.732	28.761	109.654	1.00	27.10
	ATOM 1692	N	ASP	B	54	69.845	28.876	108.459	1.00	11.56
20	ATOM 1693	CA	ASP	B	54	70.441	29.648	107.373	1.00	18.06
	ATOM 1694	C	ASP	B	54	71.034	31.027	107.663	1.00	24.26
	ATOM 1695	O	ASP	B	54	70.492	31.819	108.427	1.00	28.98
	ATOM 1696	CB	ASP	B	54	69.443	29.785	106.228	1.00	44.63
	ATOM 1697	CG	ASP	B	54	69.159	28.469	105.547	1.00	69.95
25	ATOM 1698	OD1	ASP	B	54	68.105	27.864	105.848	1.00	78.64

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		ATOM 1699	OD2	ASP	B	54	69.997	28.044	104.715	1.00	93.44
		ATOM 1700	N	THR	B	55	72.085	31.349	106.926	1.00	23.99
		ATOM 1701	CA	THR	B	55	72.763	32.607	107.070	1.00	20.15
		ATOM 1702	C	THR	B	55	72.063	33.730	106.354	1.00	26.23
5		ATOM 1703	O	THR	B	55	71.763	33.640	105.165	1.00	38.79
		ATOM 1704	CB	THR	B	55	74.187	32.496	106.563	1.00	23.02
		ATOM 1705	OG1	THR	B	55	74.908	31.629	107.440	1.00	30.58
		ATOM 1706	CG2	THR	B	55	74.875	33.873	106.509	1.00	29.67
		ATOM 1707	N	ILE	B	56	71.822	34.797	107.102	1.00	21.46
10		ATOM 1708	CA	ILE	B	56	71.182	35.995	106.592	1.00	10.30
		ATOM 1709	C	ILE	B	56	72.345	36.896	106.209	1.00	14.74
		ATOM 1710	O	ILE	B	56	73.353	36.951	106.923	1.00	25.46
		ATOM 1711	CB	ILE	B	56	70.357	36.653	107.710	1.00	11.36
		ATOM 1712	CG1	ILE	B	56	69.331	35.668	108.229	1.00	8.84
15		ATOM 1713	CG2	ILE	B	56	69.657	37.876	107.230	1.00	6.20
		ATOM 1714	CD1	ILE	B	56	68.546	36.170	109.385	1.00	23.86
		ATOM 1715	N	PRO	B	57	72.266	37.544	105.041	1.00	15.67
		ATOM 1716	CA	PRO	B	57	73.301	38.449	104.533	1.00	17.24
		ATOM 1717	C	PRO	B	57	73.789	39.440	105.586	1.00	21.26
20		ATOM 1718	O	PRO	B	57	72.986	40.083	106.254	1.00	23.01
		ATOM 1719	CB	PRO	B	57	72.573	39.168	103.415	1.00	9.36
		ATOM 1720	CG	PRO	B	57	71.741	38.103	102.856	1.00	7.04
		ATOM 1721	CD	PRO	B	57	71.166	37.426	104.073	1.00	9.81
		ATOM 1722	N	ASP	B	58	75.105	39.547	105.740	1.00	30.30
25		ATOM 1723	CA	ASP	B	58	75.698	40.464	106.714	1.00	25.45

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	ATOM 1724 C	ASP B	58	75.213	41.873	106.425	1.00	16.39
	ATOM 1725 O	ASP B	58	74.997	42.236	105.273	1.00	21.08
	ATOM 1726 CB	ASP B	58	77.242	40.470	106.625	1.00	30.88
	ATOM 1727 CG	ASP B	58	77.887	39.144	107.034	1.00	44.96
5	ATOM 1728 OD1	ASP B	58	77.189	38.259	107.578	1.00	56.78
	ATOM 1729 OD2	ASP B	58	79.115	39.000	106.810	1.00	49.46
	ATOM 1730 N	CYS B	59	75.030	42.659	107.471	1.00	12.45
	ATOM 1731 CA	CYS B	59	74.610	44.033	107.300	1.00	18.42
	ATOM 1732 C	CYS B	59	75.793	44.856	107.801	1.00	18.79
10	ATOM 1733 O	CYS B	59	76.139	44.787	108.978	1.00	20.49
	ATOM 1734 CB	CYS B	59	73.362	44.304	108.135	1.00	20.56
	ATOM 1735 SG	CYS B	59	72.567	45.910	107.802	1.00	56.09
	ATOM 1736 N	VAL B	60	76.469	45.555	106.895	1.00	21.10
	ATOM 1737 CA	VAL B	60	77.630	46.371	107.263	1.00	23.38
15	ATOM 1738 C	VAL B	60	77.245	47.810	107.574	1.00	25.36
	ATOM 1739 O	VAL B	60	76.560	48.476	106.784	1.00	35.55
	ATOM 1740 CB	VAL B	60	78.729	46.383	106.159	1.00	27.56
	ATOM 1741 CG1	VAL B	60	79.318	45.000	105.996	1.00	36.08
	ATOM 1742 CG2	VAL B	60	78.158	46.897	104.812	1.00	45.59
20	ATOM 1743 N	ALA B	61	77.771	48.315	108.684	1.00	26.08
	ATOM 1744 CA	ALA B	61	77.488	49.669	109.160	1.00	28.87
	ATOM 1745 C	ALA B	61	78.214	50.856	108.491	1.00	26.83
	ATOM 1746 O	ALA B	61	79.431	50.823	108.271	1.00	33.24
	ATOM 1747 CB	ALA B	61	77.694	49.711	110.668	1.00	26.04
25	ATOM 1748 N	LYS B	62	77.460	51.907	108.174	1.00	29.52

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		ATOM 1749	CA	LYS	B	62	78.036	53.108	107.574	1.00	26.94
		ATOM 1750	C	LYS	B	62	78.978	53.644	108.656	1.00	32.40
		ATOM 1751	O	LYS	B	62	78.819	53.330	109.847	1.00	27.29
		ATOM 1752	CB	LYS	B	62	76.946	54.150	107.247	1.00	29.52
5		ATOM 1753	CG	LYS	B	62	75.834	53.705	106.263	1.00	36.65
		ATOM 1754	CD	LYS	B	62	76.136	54.039	104.795	1.00	63.35
		ATOM 1755	CE	LYS	B	62	74.946	53.696	103.879	1.00	73.13
		ATOM 1756	NZ	LYS	B	62	75.153	54.082	102.447	1.00	69.26
		ATOM 1757	N	LYS	B	63	79.981	54.412	108.251	1.00	38.49
10		ATOM 1758	CA	LYS	B	63	80.942	54.952	109.209	1.00	45.49
		ATOM 1759	C	LYS	B	63	80.270	55.802	110.296	1.00	49.30
		ATOM 1760	O	LYS	B	63	79.285	56.492	110.029	1.00	55.54
		ATOM 1761	CB	LYS	B	63	82.003	55.759	108.481	1.00	44.72
		ATOM 1762	N	ARG	B	64	80.763	55.702	111.528	1.00	46.83
15		ATOM 1763	CA	ARG	B	64	80.220	56.475	112.644	1.00	42.29
		ATOM 1764	C	ARG	B	64	78.754	56.203	112.992	1.00	36.87
		ATOM 1765	O	ARG	B	64	78.235	56.754	113.962	1.00	42.20
		ATOM 1766	CB	ARG	B	64	80.442	57.968	112.404	1.00	48.55
		ATOM 1767	N	GLN	B	65	78.070	55.397	112.189	1.00	31.77
20		ATOM 1768	CA	GLN	B	65	76.677	55.047	112.468	1.00	28.07
		ATOM 1769	C	GLN	B	65	76.759	53.809	113.331	1.00	21.67
		ATOM 1770	O	GLN	B	65	77.482	52.881	112.998	1.00	34.41
		ATOM 1771	CB	GLN	B	65	75.914	54.719	111.177	1.00	36.06
		ATOM 1772	CG	GLN	B	65	75.171	55.896	110.567	1.00	51.33
25		ATOM 1773	CD	GLN	B	65	74.066	56.410	111.472	1.00	68.85

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		ATOM 1774	OE1	GLN	B	65	74.321	56.958	112.554	1.00	74.39
		ATOM 1775	NE2	GLN	B	65	72.823	56.201	111.050	1.00	83.77
		ATOM 1776	N	ASN	B	66	76.081	53.816	114.471	1.00	24.61
		ATOM 1777	CA	ASN	B	66	76.106	52.668	115.380	1.00	14.65
5		ATOM 1778	C	ASN	B	66	74.824	51.849	115.319	1.00	17.90
		ATOM 1779	O	ASN	B	66	74.285	51.432	116.361	1.00	7.16
		ATOM 1780	CB	ASN	B	66	76.373	53.115	116.819	1.00	20.91
		ATOM 1781	CG	ASN	B	66	77.826	53.471	117.057	1.00	43.74
		ATOM 1782	OD1	ASN	B	66	78.740	52.846	116.500	1.00	63.70
10		ATOM 1783	ND2	ASN	B	66	78.054	54.471	117.895	1.00	55.60
		ATOM 1784	N	ASN	B	67	74.360	51.606	114.090	1.00	20.98
		ATOM 1785	CA	ASN	B	67	73.148	50.839	113.821	1.00	18.39
		ATOM 1786	C	ASN	B	67	73.166	50.333	112.376	1.00	20.39
		ATOM 1787	O	ASN	B	67	73.895	50.877	111.546	1.00	29.13
15		ATOM 1788	CB	ASN	B	67	71.895	51.706	114.053	1.00	27.21
		ATOM 1789	CG	ASN	B	67	71.857	52.968	113.174	1.00	31.33
		ATOM 1790	OD1	ASN	B	67	71.742	52.893	111.947	1.00	29.35
		ATOM 1791	ND2	ASN	B	67	71.901	54.134	113.815	1.00	44.74
		ATOM 1792	N	CYS	B	68	72.426	49.256	112.102	1.00	24.91
20		ATOM 1793	CA	CYS	B	68	72.289	48.682	110.754	1.00	26.86
		ATOM 1794	C	CYS	B	68	70.837	48.186	110.672	1.00	21.60
		ATOM 1795	O	CYS	B	68	70.220	47.909	111.704	1.00	31.04
		ATOM 1796	CB	CYS	B	68	73.294	47.528	110.476	1.00	23.87
		ATOM 1797	SG	CYS	B	68	73.793	47.289	108.700	1.00	75.97
25		ATOM 1798	N	SER	B	69	70.299	48.116	109.455	1.00	20.30

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		ATOM 1799	CA	SER B	69	68.934	47.689	109.200	1.00	6.08
		ATOM 1800	C	SER B	69	68.912	46.469	108.286	1.00	10.70
		ATOM 1801	O	SER B	69	69.585	46.441	107.254	1.00	19.02
		ATOM 1802	CB	SER B	69	68.176	48.833	108.529	1.00	2.64
5		ATOM 1803	OG	SER B	69	66.888	48.429	108.121	1.00	42.64
		ATOM 1804	N	ILE B	70	68.153	45.456	108.678	1.00	8.77
		ATOM 1805	CA	ILE B	70	67.996	44.249	107.871	1.00	12.72
		ATOM 1806	C	ILE B	70	66.644	44.359	107.182	1.00	14.02
		ATOM 1807	O	ILE B	70	65.614	44.389	107.842	1.00	22.46
10		ATOM 1808	CB	ILE B	70	67.969	42.989	108.726	1.00	16.20
		ATOM 1809	CG1	ILE B	70	69.262	42.882	109.539	1.00	3.81
		ATOM 1810	CG2	ILE B	70	67.721	41.778	107.841	1.00	9.30
		ATOM 1811	CD1	ILE B	70	69.298	41.709	110.451	1.00	8.03
		ATOM 1812	N	PRO B	71	66.631	44.422	105.849	1.00	5.88
15		ATOM 1813	CA	PRO B	71	65.399	44.539	105.090	1.00	2.00
		ATOM 1814	C	PRO B	71	64.584	43.274	105.178	1.00	7.40
		ATOM 1815	O	PRO B	71	65.118	42.176	105.278	1.00	16.29
		ATOM 1816	CB	PRO B	71	65.906	44.778	103.690	1.00	2.00
		ATOM 1817	CG	PRO B	71	67.086	43.894	103.649	1.00	10.61
20		ATOM 1818	CD	PRO B	71	67.767	44.250	104.935	1.00	12.53
		ATOM 1819	N	ARG B	72	63.278	43.461	105.127	1.00	10.49
		ATOM 1820	CA	ARG B	72	62.285	42.404	105.208	1.00	10.54
		ATOM 1821	C	ARG B	72	62.532	41.244	104.265	1.00	16.00
		ATOM 1822	O	ARG B	72	62.200	40.096	104.568	1.00	18.18
25		ATOM 1823	CB	ARG B	72	60.955	43.022	104.845	1.00	10.06

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	ATOM 1824	CG	ARG	B	72	59.768	42.363	105.408	1.00	14.17
	ATOM 1825	CD	ARG	B	72	59.081	41.515	104.429	1.00	12.50
	ATOM 1826	NE	ARG	B	72	59.321	40.115	104.706	1.00	7.81
	ATOM 1827	CZ	ARG	B	72	58.361	39.207	104.732	1.00	15.75
5	ATOM 1828	NH1	ARG	B	72	57.105	39.564	104.500	1.00	22.66
	ATOM 1829	NH2	ARG	B	72	58.657	37.947	104.974	1.00	2.48
	ATOM 1830	N	LYS	B	73	63.065	41.556	103.092	1.00	18.91
	ATOM 1831	CA	LYS	B	73	63.327	40.531	102.108	1.00	4.64
	ATOM 1832	C	LYS	B	73	64.287	39.519	102.644	1.00	4.04
10	ATOM 1833	O	LYS	B	73	64.294	38.389	102.161	1.00	20.63
	ATOM 1834	CB	LYS	B	73	63.834	41.135	100.799	1.00	2.00
	ATOM 1835	CG	LYS	B	73	65.152	41.833	100.897	1.00	22.55
	ATOM 1836	CD	LYS	B	73	65.547	42.459	99.582	1.00	29.16
	ATOM 1837	CE	LYS	B	73	66.935	43.052	99.695	1.00	41.53
15	ATOM 1838	NZ	LYS	B	73	67.479	43.570	98.415	1.00	41.01
	ATOM 1839	N	ASN	B	74	65.072	39.910	103.654	1.00	2.00
	ATOM 1840	CA	ASN	B	74	66.055	39.011	104.284	1.00	7.06
	ATOM 1841	C	ASN	B	74	65.609	38.324	105.570	1.00	11.68
	ATOM 1842	O	ASN	B	74	66.266	37.392	106.037	1.00	26.45
20	ATOM 1843	CB	ASN	B	74	67.369	39.729	104.571	1.00	12.78
	ATOM 1844	CG	ASN	B	74	68.079	40.205	103.316	1.00	22.78
	ATOM 1845	OD1	ASN	B	74	69.140	40.824	103.405	1.00	38.07
	ATOM 1846	ND2	ASN	B	74	67.507	39.931	102.144	1.00	30.93
	ATOM 1847	N	LEU	B	75	64.482	38.759	106.116	1.00	14.86
25	ATOM 1848	CA	LEU	B	75	63.941	38.213	107.354	1.00	3.45

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		ATOM 1849	C	LEU	B	75	62.875	37.166	107.119	1.00	4.44
		ATOM 1850	O	LEU	B	75	62.171	37.206	106.117	1.00	16.13
		ATOM 1851	CB	LEU	B	75	63.283	39.325	108.141	1.00	2.00
		ATOM 1852	CG	LEU	B	75	64.134	40.536	108.410	1.00	2.00
5		ATOM 1853	CD1	LEU	B	75	63.272	41.606	108.965	1.00	10.78
		ATOM 1854	CD2	LEU	B	75	65.200	40.187	109.398	1.00	9.08
		ATOM 1855	N	LEU	B	76	62.778	36.216	108.041	1.00	9.59
		ATOM 1856	CA	LEU	B	76	61.744	35.196	108.003	1.00	5.15
		ATOM 1857	C	LEU	B	76	60.955	35.540	109.242	1.00	8.06
10		ATOM 1858	O	LEU	B	76	61.356	35.245	110.369	1.00	13.01
		ATOM 1859	CB	LEU	B	76	62.289	33.769	108.122	1.00	7.20
		ATOM 1860	CG	LEU	B	76	61.241	32.699	108.474	1.00	5.45
		ATOM 1861	CD1	LEU	B	76	60.154	32.616	107.429	1.00	2.00
		ATOM 1862	CD2	LEU	B	76	61.908	31.361	108.641	1.00	7.22
15		ATOM 1863	N	LEU	B	77	59.880	36.266	109.026	1.00	7.03
		ATOM 1864	CA	LEU	B	77	59.029	36.674	110.113	1.00	10.10
		ATOM 1865	C	LEU	B	77	58.361	35.456	110.734	1.00	5.75
		ATOM 1866	O	LEU	B	77	58.056	34.490	110.049	1.00	9.93
		ATOM 1867	CB	LEU	B	77	57.999	37.684	109.606	1.00	16.31
20		ATOM 1868	CG	LEU	B	77	58.586	38.919	108.898	1.00	2.00
		ATOM 1869	CD1	LEU	B	77	57.482	39.799	108.482	1.00	19.18
		ATOM 1870	CD2	LEU	B	77	59.517	39.709	109.782	1.00	12.48
		ATOM 1871	N	TYR	B	78	58.152	35.537	112.040	1.00	2.00
		ATOM 1872	CA	TYR	B	78	57.555	34.495	112.853	1.00	2.00
25		ATOM 1873	C	TYR	B	78	58.367	33.240	113.124	1.00	2.00

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	ATOM 1874 O	TYR B	78	57.829	32.159	113.354	1.00	8.48
	ATOM 1875 CB	TYR B	78	56.147	34.181	112.418	1.00	3.12
	ATOM 1876 CG	TYR B	78	55.281	35.405	112.386	1.00	2.00
	ATOM 1877 CD1	TYR B	78	54.654	35.866	113.489	1.00	2.00
5	ATOM 1878 CD2	TYR B	78	55.070	36.082	111.238	1.00	3.25
	ATOM 1879 CE1	TYR B	78	53.826	36.990	113.434	1.00	2.00
	ATOM 1880 CE2	TYR B	78	54.244	37.194	111.185	1.00	2.89
	ATOM 1881 CZ	TYR B	78	53.630	37.639	112.271	1.00	2.00
	ATOM 1882 OH	TYR B	78	52.796	38.708	112.173	1.00	4.47
10	ATOM 1883 N	GLN B	79	59.680	33.429	113.189	1.00	6.32
	ATOM 1884 CA	GLN B	79	60.641	32.377	113.519	1.00	7.06
	ATOM 1885 C	GLN B	79	61.790	33.151	114.162	1.00	11.38
	ATOM 1886 O	GLN B	79	61.995	34.323	113.838	1.00	8.89
	ATOM 1887 CB	GLN B	79	61.123	31.603	112.282	1.00	4.16
15	ATOM 1888 CG	GLN B	79	61.876	30.307	112.627	1.00	4.02
	ATOM 1889 CD	GLN B	79	61.253	29.556	113.808	1.00	11.97
	ATOM 1890 OE1	GLN B	79	60.360	28.733	113.637	1.00	32.59
	ATOM 1891 NE2	GLN B	79	61.738	29.829	115.008	1.00	19.06
	ATOM 1892 N	TYR B	80	62.439	32.548	115.156	1.00	2.00
20	ATOM 1893 CA	TYR B	80	63.550	33.183	115.858	1.00	2.68
	ATOM 1894 C	TYR B	80	64.806	33.302	114.997	1.00	2.80
	ATOM 1895 O	TYR B	80	64.949	32.601	114.008	1.00	7.23
	ATOM 1896 CB	TYR B	80	63.872	32.420	117.141	1.00	2.00
	ATOM 1897 CG	TYR B	80	62.758	32.422	118.158	1.00	2.00
25	ATOM 1898 CD1	TYR B	80	61.599	31.782	117.941	1.00	2.13

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	ATOM 1899	CD2	TYR	B	80	62.850	33.111	119.306	1.00	2.00
	ATOM 1900	CE1	TYR	B	80	60.540	31.838	118.848	1.00	19.31
	ATOM 1901	CE2	TYR	B	80	61.797	33.167	120.218	1.00	17.82
	ATOM 1902	CZ	TYR	B	80	60.643	32.536	119.982	1.00	23.68
5	ATOM 1903	OH	TYR	B	80	59.583	32.631	120.865	1.00	39.08
	ATOM 1904	N	MET	B	81	65.682	34.238	115.333	1.00	6.73
	ATOM 1905	CA	MET	B	81	66.933	34.425	114.602	1.00	9.26
	ATOM 1906	C	MET	B	81	67.966	34.925	115.589	1.00	10.30
	ATOM 1907	O	MET	B	81	67.625	35.582	116.572	1.00	26.61
10	ATOM 1908	CB	MET	B	81	66.771	35.411	113.440	1.00	6.54
	ATOM 1909	CG	MET	B	81	66.396	36.823	113.849	1.00	10.97
	ATOM 1910	SD	MET	B	81	66.033	37.944	112.463	1.00	10.01
	ATOM 1911	CE	MET	B	81	67.643	38.341	111.935	1.00	2.00
	ATOM 1912	N	ALA	B	82	69.214	34.537	115.370	1.00	14.20
15	ATOM 1913	CA	ALA	B	82	70.308	34.929	116.239	1.00	2.56
	ATOM 1914	C	ALA	B	82	70.985	36.115	115.613	1.00	5.69
	ATOM 1915	O	ALA	B	82	71.328	36.085	114.437	1.00	12.99
	ATOM 1916	CB	ALA	B	82	71.274	33.812	116.384	1.00	7.10
	ATOM 1917	N	ILE	B	83	71.185	37.157	116.405	1.00	9.36
20	ATOM 1918	CA	ILE	B	83	71.811	38.384	115.931	1.00	9.63
	ATOM 1919	C	ILE	B	83	72.910	38.818	116.886	1.00	9.24
	ATOM 1920	O	ILE	B	83	72.736	38.795	118.111	1.00	3.17
	ATOM 1921	CB	ILE	B	83	70.798	39.554	115.885	1.00	2.85
	ATOM 1922	CG1	ILE	B	83	69.492	39.129	115.225	1.00	17.07
25	ATOM 1923	CG2	ILE	B	83	71.366	40.686	115.113	1.00	2.00

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		ATOM 1924	CD1	ILE	B	83	68.322	39.986	115.624	1.00	14.35
		ATOM 1925	N	TRP	B	84	74.031	39.229	116.313	1.00	8.14
		ATOM 1926	CA	TRP	B	84	75.177	39.716	117.074	1.00	11.94
		ATOM 1927	C	TRP	B	84	75.933	40.665	116.168	1.00	18.31
5		ATOM 1928	O	TRP	B	84	75.794	40.627	114.935	1.00	22.53
		ATOM 1929	CB	TRP	B	84	76.104	38.588	117.558	1.00	15.20
		ATOM 1930	CG	TRP	B	84	76.883	37.918	116.465	1.00	22.16
		ATOM 1931	CD1	TRP	B	84	78.124	38.251	116.010	1.00	17.57
		ATOM 1932	CD2	TRP	B	84	76.429	36.856	115.633	1.00	33.33
10		ATOM 1933	NE1	TRP	B	84	78.465	37.475	114.936	1.00	25.82
		ATOM 1934	CE2	TRP	B	84	77.438	36.607	114.685	1.00	34.38
		ATOM 1935	CE3	TRP	B	84	75.256	36.095	115.590	1.00	34.46
		ATOM 1936	CZ2	TRP	B	84	77.311	35.630	113.705	1.00	45.24
		ATOM 1937	CZ3	TRP	B	84	75.131	35.128	114.620	1.00	39.85
15		ATOM 1938	CH2	TRP	B	84	76.152	34.900	113.687	1.00	40.90
		ATOM 1939	N	VAL	B	85	76.700	41.549	116.789	1.00	18.18
		ATOM 1940	CA	VAL	B	85	77.463	42.525	116.042	1.00	23.74
		ATOM 1941	C	VAL	B	85	78.945	42.225	116.250	1.00	21.48
		ATOM 1942	O	VAL	B	85	79.346	41.750	117.319	1.00	26.28
20		ATOM 1943	CB	VAL	B	85	77.033	43.974	116.429	1.00	6.75
		ATOM 1944	CG1	VAL	B	85	76.894	44.106	117.899	1.00	25.06
		ATOM 1945	CG2	VAL	B	85	78.008	44.969	115.907	1.00	22.02
		ATOM 1946	N	GLN	B	86	79.736	42.442	115.204	1.00	20.77
		ATOM 1947	CA	GLN	B	86	81.167	42.172	115.230	1.00	22.05
25		ATOM 1948	C	GLN	B	86	82.038	43.390	114.856	1.00	26.85

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		ATOM 1949 O	GLN B	86	81.843	43.997	113.800	1.00	31.77
		ATOM 1950 CB	GLN B	86	81.410	41.027	114.270	1.00	24.21
		ATOM 1951 CG	GLN B	86	82.818	40.674	114.051	1.00	41.66
		ATOM 1952 CD	GLN B	86	82.925	39.753	112.905	1.00	48.32
5		ATOM 1953 OE1	GLN B	86	83.519	40.097	111.878	1.00	57.37
		ATOM 1954 NE2	GLN B	86	82.285	38.582	113.026	1.00	31.93
		ATOM 1955 N	ALA B	87	82.994	43.733	115.726	1.00	29.54
		ATOM 1956 CA	ALA B	87	83.898	44.869	115.522	1.00	24.56
		ATOM 1957 C	ALA B	87	85.246	44.377	115.026	1.00	35.65
10		ATOM 1958 O	ALA B	87	85.904	43.569	115.681	1.00	31.48
		ATOM 1959 CB	ALA B	87	84.072	45.615	116.798	1.00	19.59
		ATOM 1960 N	GLU B	88	85.639	44.860	113.856	1.00	50.25
		ATOM 1961 CA	GLU B	88	86.891	44.473	113.219	1.00	57.79
		ATOM 1962 C	GLU B	88	87.783	45.698	113.124	1.00	53.86
15		ATOM 1963 O	GLU B	88	87.477	46.677	112.423	1.00	58.80
		ATOM 1964 CB	GLU B	88	86.615	43.895	111.813	1.00	80.78
		ATOM 1965 CG	GLU B	88	87.843	43.362	111.053	1.00	99.34
		ATOM 1966 CD	GLU B	88	87.542	43.031	109.588	1.00	115.40
		ATOM 1967 OE1	GLU B	88	87.733	43.920	108.719	1.00	117.80
20		ATOM 1968 OE2	GLU B	88	87.122	41.882	109.310	1.00	118.72
		ATOM 1969 N	ASN B	89	88.894	45.630	113.837	1.00	49.46
		ATOM 1970 CA	ASN B	89	89.876	46.710	113.873	1.00	52.94
		ATOM 1971 C	ASN B	89	91.200	46.115	113.413	1.00	57.28
		ATOM 1972 O	ASN B	89	91.423	44.892	113.523	1.00	50.10
25		ATOM 1973 CB	ASN B	89	90.060	47.155	115.322	1.00	48.01

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5	ATOM 1974	CG	ASN	B	89	90.505	48.570	115.462	1.00	32.79
	ATOM 1975	OD1	ASN	B	89	90.291	49.393	114.579	1.00	60.19
	ATOM 1976	ND2	ASN	B	89	91.097	48.881	116.600	1.00	35.23
	ATOM 1977	N	MET	B	90	92.111	46.983	112.989	1.00	55.54
	ATOM 1978	CA	MET	B	90	93.443	46.554	112.559	1.00	49.89
10	ATOM 1979	C	MET	B	90	94.259	45.839	113.673	1.00	41.32
	ATOM 1980	O	MET	B	90	95.312	45.276	113.402	1.00	40.99
	ATOM 1981	CB	MET	B	90	94.218	47.769	112.048	1.00	52.77
	ATOM 1982	CG	MET	B	90	95.660	47.486	111.688	1.00	61.00
	ATOM 1983	SD	MET	B	90	96.655	48.983	111.553	1.00	68.75
15	ATOM 1984	CE	MET	B	90	97.264	49.107	113.220	1.00	61.46
	ATOM 1985	N	LEU	B	91	93.766	45.850	114.912	1.00	39.74
	ATOM 1986	CA	LEU	B	91	94.458	45.215	116.039	1.00	36.69
	ATOM 1987	C	LEU	B	91	93.622	44.187	116.775	1.00	43.44
	ATOM 1988	O	LEU	B	91	93.922	43.875	117.933	1.00	48.02
20	ATOM 1989	CB	LEU	B	91	94.876	46.247	117.097	1.00	44.79
	ATOM 1990	CG	LEU	B	91	95.806	47.424	116.830	1.00	51.06
	ATOM 1991	CD1	LEU	B	91	96.213	47.983	118.164	1.00	51.93
	ATOM 1992	CD2	LEU	B	91	97.035	47.003	116.054	1.00	55.19
	ATOM 1993	N	GLY	B	92	92.534	43.717	116.169	1.00	50.78
25	ATOM 1994	CA	GLY	B	92	91.709	42.734	116.860	1.00	48.91
	ATOM 1995	C	GLY	B	92	90.254	42.697	116.445	1.00	41.73
	ATOM 1996	O	GLY	B	92	89.830	43.485	115.588	1.00	36.31
	ATOM 1997	N	SER	B	93	89.497	41.794	117.074	1.00	35.21
	ATOM 1998	CA	SER	B	93	88.079	41.609	116.790	1.00	31.29

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	ATOM 1999	C	SER B	93	87.348	41.294	118.092	1.00	32.64
	ATOM 2000	O	SER B	93	87.939	40.746	119.019	1.00	37.09
	ATOM 2001	CB	SER B	93	87.880	40.452	115.796	1.00	37.53
	ATOM 2002	OG	SER B	93	88.578	40.658	114.572	1.00	47.06
5	ATOM 2003	N	SER B	94	86.075	41.670	118.160	1.00	35.05
	ATOM 2004	CA	SER B	94	85.234	41.420	119.327	1.00	31.76
	ATOM 2005	C	SER B	94	83.836	41.145	118.786	1.00	28.08
	ATOM 2006	O	SER B	94	83.547	41.466	117.632	1.00	28.74
	ATOM 2007	CB	SER B	94	85.203	42.655	120.225	1.00	40.14
10	ATOM 2008	OG	SER B	94	84.830	43.813	119.485	1.00	55.55
	ATOM 2009	N	GLU B	95	82.975	40.559	119.610	1.00	22.29
	ATOM 2010	CA	GLU B	95	81.602	40.245	119.208	1.00	23.66
	ATOM 2011	C	GLU B	95	80.683	40.453	120.392	1.00	23.55
	ATOM 2012	O	GLU B	95	81.084	40.277	121.541	1.00	36.58
15	ATOM 2013	CB	GLU B	95	81.467	38.772	118.804	1.00	35.33
	ATOM 2014	CG	GLU B	95	82.295	38.306	117.612	1.00	65.31
	ATOM 2015	CD	GLU B	95	81.974	36.869	117.201	1.00	72.70
	ATOM 2016	OE1	GLU B	95	82.199	36.527	116.016	1.00	81.21
	ATOM 2017	OE2	GLU B	95	81.487	36.090	118.055	1.00	78.88
20	ATOM 2018	N	SER B	96	79.436	40.784	120.129	1.00	17.96
	ATOM 2019	CA	SER B	96	78.493	40.958	121.220	1.00	23.25
	ATOM 2020	C	SER B	96	77.868	39.614	121.521	1.00	15.66
	ATOM 2021	O	SER B	96	77.948	38.681	120.721	1.00	23.83
	ATOM 2022	CB	SER B	96	77.378	41.891	120.790	1.00	29.44
25	ATOM 2023	OG	SER B	96	76.689	41.331	119.678	1.00	27.45

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	ATOM	2024	N	PRO	B	97	77.309	39.460	122.714	1.00	13.06
	ATOM	2025	CA	PRO	B	97	76.687	38.157	122.979	1.00	26.58
	ATOM	2026	C	PRO	B	97	75.510	38.035	122.000	1.00	31.37
	ATOM	2027	O	PRO	B	97	74.983	39.047	121.529	1.00	50.17
5	ATOM	2028	CB	PRO	B	97	76.233	38.258	124.450	1.00	14.83
	ATOM	2029	CG	PRO	B	97	76.286	39.738	124.767	1.00	31.35
	ATOM	2030	CD	PRO	B	97	77.420	40.274	123.931	1.00	22.15
	ATOM	2031	N	LYS	B	98	75.114	36.817	121.669	1.00	29.50
	ATOM	2032	CA	LYS	B	98	74.037	36.647	120.719	1.00	15.22
10	ATOM	2033	C	LYS	B	98	72.654	36.884	121.272	1.00	12.90
	ATOM	2034	O	LYS	B	98	72.307	36.452	122.369	1.00	15.14
	ATOM	2035	CB	LYS	B	98	74.138	35.287	120.037	1.00	17.40
	ATOM	2036	CG	LYS	B	98	75.354	35.171	119.110	1.00	19.59
	ATOM	2037	CD	LYS	B	98	75.418	33.820	118.420	1.00	30.45
15	ATOM	2038	CE	LYS	B	98	76.754	33.613	117.709	1.00	41.60
	ATOM	2039	NZ	LYS	B	98	77.918	33.528	118.646	1.00	45.72
	ATOM	2040	N	LEU	B	99	71.885	37.643	120.511	1.00	13.81
	ATOM	2041	CA	LEU	B	99	70.519	37.965	120.866	1.00	16.49
	ATOM	2042	C	LEU	B	99	69.581	37.052	120.074	1.00	10.03
20	ATOM	2043	O	LEU	B	99	69.825	36.741	118.919	1.00	13.01
	ATOM	2044	CB	LEU	B	99	70.250	39.439	120.572	1.00	20.30
	ATOM	2045	CG	LEU	B	99	68.875	39.984	120.934	1.00	26.96
	ATOM	2046	CD1	LEU	B	99	68.518	39.697	122.407	1.00	41.88
	ATOM	2047	CD2	LEU	B	99	68.876	41.468	120.633	1.00	24.09
25	ATOM	2048	N	CYS	B	100	68.485	36.663	120.693	1.00	8.76

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		ATOM	2049	CA	CYS	B	100	67.549	35.754	120.077	1.00	2.00
		ATOM	2050	C	CYS	B	100	66.139	36.309	120.028	1.00	8.28
		ATOM	2051	O	CYS	B	100	65.420	36.316	121.039	1.00	16.19
		ATOM	2052	CB	CYS	B	100	67.524	34.474	120.900	1.00	13.10
5		ATOM	2053	SG	CYS	B	100	66.739	33.082	120.055	1.00	42.72
		ATOM	2054	N	LEU	B	101	65.704	36.682	118.838	1.00	5.57
		ATOM	2055	CA	LEU	B	101	64.364	37.217	118.679	1.00	2.79
		ATOM	2056	C	LEU	B	101	63.686	36.791	117.402	1.00	6.66
		ATOM	2057	O	LEU	B	101	64.294	36.272	116.480	1.00	11.75
10		ATOM	2058	CB	LEU	B	101	64.409	38.741	118.688	1.00	14.80
		ATOM	2059	CG	LEU	B	101	65.368	39.390	117.684	1.00	9.02
		ATOM	2060	CD1	LEU	B	101	64.772	39.497	116.287	1.00	24.79
		ATOM	2061	CD2	LEU	B	101	65.694	40.757	118.204	1.00	19.81
		ATOM	2062	N	ASP	B	102	62.409	37.098	117.350	1.00	10.55
15		ATOM	2063	CA	ASP	B	102	61.565	36.847	116.203	1.00	4.15
		ATOM	2064	C	ASP	B	102	61.279	38.310	115.887	1.00	11.10
		ATOM	2065	O	ASP	B	102	60.789	39.035	116.737	1.00	13.88
		ATOM	2066	CB	ASP	B	102	60.313	36.140	116.697	1.00	2.00
		ATOM	2067	CG	ASP	B	102	59.202	36.106	115.692	1.00	6.99
20		ATOM	2068	OD1	ASP	B	102	59.249	36.794	114.657	1.00	11.62
		ATOM	2069	OD2	ASP	B	102	58.241	35.376	115.966	1.00	7.08
		ATOM	2070	N	PRO	B	103	61.610	38.774	114.676	1.00	9.23
		ATOM	2071	CA	PRO	B	103	61.373	40.174	114.309	1.00	2.00
		ATOM	2072	C	PRO	B	103	60.021	40.700	114.761	1.00	2.17
25		ATOM	2073	O	PRO	B	103	59.923	41.799	115.270	1.00	10.86

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	ATOM 2074 CB	PRO B 103	61.473	40.144	112.786	1.00	2.00
	ATOM 2075 CG	PRO B 103	62.447	39.107	112.547	1.00	2.00
	ATOM 2076 CD	PRO B 103	62.073	38.008	113.510	1.00	3.88
	ATOM 2077 N	MET B 104	58.991	39.882	114.626	1.00	3.18
5	ATOM 2078 CA	MET B 104	57.655	40.291	115.007	1.00	4.17
	ATOM 2079 C	MET B 104	57.405	40.465	116.503	1.00	14.98
	ATOM 2080 O	MET B 104	56.365	40.988	116.891	1.00	26.16
	ATOM 2081 CB	MET B 104	56.633	39.343	114.396	1.00	3.50
	ATOM 2082 CG	MET B 104	56.646	39.396	112.888	1.00	21.56
10	ATOM 2083 SD	MET B 104	56.589	41.102	112.295	1.00	22.83
	ATOM 2084 CE	MET B 104	54.922	41.365	112.318	1.00	32.17
	ATOM 2085 N	ASP B 105	58.360	40.057	117.335	1.00	15.71
	ATOM 2086 CA	ASP B 105	58.247	40.169	118.792	1.00	6.08
	ATOM 2087 C	ASP B 105	58.751	41.527	119.295	1.00	11.63
15	ATOM 2088 O	ASP B 105	58.581	41.877	120.464	1.00	18.54
	ATOM 2089 CB	ASP B 105	59.055	39.061	119.479	1.00	4.91
	ATOM 2090 CG	ASP B 105	58.285	37.771	119.655	1.00	11.82
	ATOM 2091 OD1	ASP B 105	57.102	37.723	119.270	1.00	17.23
	ATOM 2092 OD2	ASP B 105	58.864	36.801	120.204	1.00	15.36
20	ATOM 2093 N	VAL B 106	59.389	42.285	118.414	1.00	13.66
	ATOM 2094 CA	VAL B 106	59.936	43.584	118.781	1.00	5.25
	ATOM 2095 C	VAL B 106	59.443	44.666	117.851	1.00	2.00
	ATOM 2096 O	VAL B 106	60.168	45.566	117.487	1.00	2.87
	ATOM 2097 CB	VAL B 106	61.482	43.568	118.759	1.00	2.00
25	ATOM 2098 CG1	VAL B 106	61.992	42.640	119.805	1.00	10.03

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		ATOM	2099	CG2	VAL	B	106	61.986	43.092	117.440	1.00	2.00
		ATOM	2100	N	VAL	B	107	58.200	44.564	117.445	1.00	2.00
		ATOM	2101	CA	VAL	B	107	57.643	45.552	116.558	1.00	3.49
		ATOM	2102	C	VAL	B	107	57.474	46.843	117.313	1.00	2.00
5		ATOM	2103	O	VAL	B	107	57.073	46.820	118.469	1.00	2.00
		ATOM	2104	CB	VAL	B	107	56.297	45.112	116.032	1.00	2.89
		ATOM	2105	CG1	VAL	B	107	55.584	46.280	115.414	1.00	17.25
		ATOM	2106	CG2	VAL	B	107	56.490	44.029	115.010	1.00	2.00
		ATOM	2107	N	LYS	B	108	57.858	47.950	116.675	1.00	5.15
10		ATOM	2108	CA	LYS	B	108	57.749	49.287	117.260	1.00	2.13
		ATOM	2109	C	LYS	B	108	56.426	49.876	116.861	1.00	9.19
		ATOM	2110	O	LYS	B	108	56.207	50.229	115.710	1.00	20.27
		ATOM	2111	CB	LYS	B	108	58.829	50.213	116.766	1.00	2.00
		ATOM	2112	CG	LYS	B	108	58.541	51.649	117.082	1.00	4.75
15		ATOM	2113	CD	LYS	B	108	59.710	52.490	116.701	1.00	30.55
		ATOM	2114	CE	LYS	B	108	59.532	53.904	117.147	1.00	34.34
		ATOM	2115	NZ	LYS	B	108	60.860	54.596	117.106	1.00	60.13
		ATOM	2116	N	LEU	B	109	55.563	50.011	117.849	1.00	14.42
		ATOM	2117	CA	LEU	B	109	54.217	50.525	117.675	1.00	3.15
20		ATOM	2118	C	LEU	B	109	54.119	52.037	117.878	1.00	9.95
		ATOM	2119	O	LEU	B	109	54.903	52.633	118.629	1.00	27.09
		ATOM	2120	CB	LEU	B	109	53.324	49.838	118.701	1.00	3.42
		ATOM	2121	CG	LEU	B	109	52.071	49.054	118.352	1.00	2.00
		ATOM	2122	CD1	LEU	B	109	52.271	48.180	117.145	1.00	5.57
25		ATOM	2123	CD2	LEU	B	109	51.760	48.215	119.544	1.00	2.00

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		ATOM 2124	N	GLU	B	110	53.187	52.656	117.156	1.00	15.66
		ATOM 2125	CA	GLU	B	110	52.909	54.082	117.268	1.00	11.54
		ATOM 2126	C	GLU	B	110	51.494	54.114	117.831	1.00	13.87
		ATOM 2127	O	GLU	B	110	50.699	53.211	117.587	1.00	17.72
5		ATOM 2128	CB	GLU	B	110	53.033	54.792	115.941	1.00	17.25
		ATOM 2129	CG	GLU	B	110	54.424	55.286	115.712	1.00	32.36
		ATOM 2130	CD	GLU	B	110	54.507	56.137	114.476	1.00	62.40
		ATOM 2131	OE1	GLU	B	110	53.796	57.168	114.420	1.00	74.53
		ATOM 2132	OE2	GLU	B	110	55.269	55.771	113.555	1.00	72.05
10		ATOM 2133	N	PRO	B	111	51.184	55.124	118.642	1.00	13.97
		ATOM 2134	CA	PRO	B	111	49.881	55.284	119.286	1.00	2.00
		ATOM 2135	C	PRO	B	111	48.662	55.274	118.383	1.00	7.35
		ATOM 2136	O	PRO	B	111	48.752	55.539	117.185	1.00	16.79
		ATOM 2137	CB	PRO	B	111	50.052	56.567	120.061	1.00	2.00
15		ATOM 2138	CG	PRO	B	111	50.984	57.324	119.214	1.00	2.00
		ATOM 2139	CD	PRO	B	111	51.997	56.337	118.809	1.00	9.69
		ATOM 2140	N	PRO	B	112	47.510	54.885	118.942	1.00	3.95
		ATOM 2141	CA	PRO	B	112	46.248	54.821	118.215	1.00	2.00
		ATOM 2142	C	PRO	B	112	45.630	56.175	117.920	1.00	7.86
20		ATOM 2143	O	PRO	B	112	45.943	57.191	118.557	1.00	12.87
		ATOM 2144	CB	PRO	B	112	45.372	53.957	119.126	1.00	2.00
		ATOM 2145	CG	PRO	B	112	45.882	54.199	120.452	1.00	2.00
		ATOM 2146	CD	PRO	B	112	47.366	54.301	120.285	1.00	3.91
		ATOM 2147	N	MET	B	113	44.774	56.181	116.909	1.00	17.20
25		ATOM 2148	CA	MET	B	113	44.115	57.385	116.444	1.00	20.22

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	ATOM 2149 C	MET B 113	42.881	57.541	117.269	1.00	19.18
	ATOM 2150 O	MET B 113	41.875	56.898	116.995	1.00	34.07
	ATOM 2151 CB	MET B 113	43.741	57.242	114.969	1.00	36.28
	ATOM 2152 CG	MET B 113	44.944	57.126	114.031	1.00	60.82
5	ATOM 2153 SD	MET B 113	44.719	55.949	112.650	1.00	81.10
	ATOM 2154 CE	MET B 113	43.110	56.486	111.965	1.00	77.86
	ATOM 2155 N	LEU B 114	42.982	58.368	118.303	1.00	21.28
	ATOM 2156 CA	LEU B 114	41.877	58.641	119.217	1.00	13.29
	ATOM 2157 C	LEU B 114	41.300	59.998	118.884	1.00	7.45
10	ATOM 2158 O	LEU B 114	42.031	60.988	118.775	1.00	21.78
	ATOM 2159 CB	LEU B 114	42.391	58.629	120.668	1.00	16.32
	ATOM 2160 CG	LEU B 114	41.483	59.007	121.833	1.00	3.57
	ATOM 2161 CD1	LEU B 114	40.564	57.877	122.126	1.00	17.76
	ATOM 2162 CD2	LEU B 114	42.314	59.323	123.056	1.00	23.66
15	ATOM 2163 N	GLN B 115	39.994	60.046	118.704	1.00	7.64
	ATOM 2164 CA	GLN B 115	39.345	61.312	118.400	1.00	20.44
	ATOM 2165 C	GLN B 115	38.009	61.431	119.120	1.00	16.12
	ATOM 2166 O	GLN B 115	37.407	60.437	119.493	1.00	20.93
	ATOM 2167 CB	GLN B 115	39.138	61.437	116.903	1.00	22.47
20	ATOM 2168 CG	GLN B 115	38.234	60.378	116.327	1.00	30.48
	ATOM 2169 CD	GLN B 115	38.561	60.074	114.874	1.00	54.44
	ATOM 2170 OE1	GLN B 115	39.527	60.606	114.306	1.00	67.37
	ATOM 2171 NE2	GLN B 115	37.780	59.190	114.271	1.00	65.71
	ATOM 2172 N	ALA B 116	37.578	62.652	119.365	1.00	12.86
25	ATOM 2173 CA	ALA B 116	36.308	62.885	120.023	1.00	4.86

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		ATOM 2174 C	ALA B 116	35.184	62.721	119.020	1.00	10.12
		ATOM 2175 O	ALA B 116	35.397	62.866	117.817	1.00	30.30
		ATOM 2176 CB	ALA B 116	36.285	64.265	120.563	1.00	18.82
		ATOM 2177 N	LEU B 117	33.967	62.550	119.524	1.00	16.77
5		ATOM 2178 CA	LEU B 117	32.810	62.382	118.664	1.00	24.58
		ATOM 2179 C	LEU B 117	31.821	63.527	118.584	1.00	44.04
		ATOM 2180 O	LEU B 117	31.299	63.996	119.608	1.00	32.52
		ATOM 2181 CB	LEU B 117	32.083	61.101	118.988	1.00	18.14
		ATOM 2182 CG	LEU B 117	32.848	59.903	118.461	1.00	14.79
10		ATOM 2183 CD1	LEU B 117	31.903	58.752	118.420	1.00	17.93
		ATOM 2184 CD2	LEU B 117	33.388	60.185	117.077	1.00	20.85
		ATOM 2185 N	ASP B 118	31.571	63.924	117.329	1.00	69.91
		ATOM 2186 CA	ASP B 118	30.672	65.011	116.905	1.00	89.27
		ATOM 2187 C	ASP B 118	29.211	64.542	117.022	1.00	92.39
15		ATOM 2188 O	ASP B 118	28.607	64.114	116.027	1.00	96.04
		ATOM 2189 CB	ASP B 118	30.997	65.383	115.426	1.00	100.29
		ATOM 2190 CG	ASP B 118	30.625	66.837	115.046	1.00	105.14
		ATOM 2191 OD1	ASP B 118	31.400	67.456	114.280	1.00	106.25
		ATOM 2192 OD2	ASP B 118	29.564	67.352	115.466	1.00	102.47
20		ATOM 2193 N	ILE B 119	28.685	64.559	118.248	1.00	90.61
		ATOM 2194 CA	ILE B 119	27.299	64.162	118.512	1.00	93.06
		ATOM 2195 C	ILE B 119	26.391	65.384	118.315	1.00	105.17
		ATOM 2196 O	ILE B 119	25.613	65.402	117.335	1.00	109.03
		ATOM 2197 CB	ILE B 119	27.130	63.581	119.959	1.00	76.48
25		ATOM 2198 CG1	ILE B 119	27.770	62.194	120.060	1.00	69.07

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	ATOM	2199	CG2	ILE	B	119	25.661	63.487	120.351	1.00	66.20
	ATOM	2200	CD1	ILE	B	119	27.100	61.126	119.223	1.00	52.40
	ATOM	2201	N	GLY	B	120	26.510	66.339	119.116	1.00	117.57
	ATOM	2202	N	GLN	B	127	21.597	64.482	129.587	1.00	51.34
5	ATOM	2203	CA	GLN	B	127	22.386	63.913	130.723	1.00	58.25
	ATOM	2204	C	GLN	B	127	23.699	64.712	130.807	1.00	58.83
	ATOM	2205	O	GLN	B	127	24.278	65.030	129.773	1.00	61.07
	ATOM	2206	CB	GLN	B	127	22.648	62.419	130.479	1.00	55.58
	ATOM	2207	CG	GLN	B	127	23.295	61.688	131.663	1.00	63.54
10	ATOM	2208	CD	GLN	B	127	23.172	60.171	131.585	1.00	66.91
	ATOM	2209	OE1	GLN	B	127	24.002	59.439	132.131	1.00	60.57
	ATOM	2210	NE2	GLN	B	127	22.111	59.691	130.939	1.00	73.78
	ATOM	2211	N	PRO	B	128	24.169	65.060	132.028	1.00	54.26
	ATOM	2212	CA	PRO	B	128	25.406	65.833	132.191	1.00	42.63
15	ATOM	2213	C	PRO	B	128	26.689	65.078	132.589	1.00	39.09
	ATOM	2214	O	PRO	B	128	26.655	64.113	133.370	1.00	38.49
	ATOM	2215	CB	PRO	B	128	25.008	66.832	133.267	1.00	48.50
	ATOM	2216	CG	PRO	B	128	24.229	65.948	134.224	1.00	59.27
	ATOM	2217	CD	PRO	B	128	23.460	64.955	133.321	1.00	60.47
20	ATOM	2218	N	GLY	B	129	27.821	65.594	132.098	1.00	28.14
	ATOM	2219	CA	GLY	B	129	29.134	65.022	132.369	1.00	13.87
	ATOM	2220	C	GLY	B	129	29.589	63.848	131.508	1.00	7.24
	ATOM	2221	O	GLY	B	129	30.310	62.986	132.002	1.00	14.17
	ATOM	2222	N	CYS	B	130	29.211	63.841	130.227	1.00	9.36
25	ATOM	2223	CA	CYS	B	130	29.539	62.761	129.285	1.00	17.46

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	ATOM 2224 C	CYS B 130	30.430	63.141	128.088	1.00	20.44
	ATOM 2225 O	CYS B 130	30.445	64.292	127.644	1.00	26.41
	ATOM 2226 CB	CYS B 130	28.248	62.130	128.716	1.00	18.36
	ATOM 2227 SG	CYS B 130	27.168	61.194	129.850	1.00	30.18
5	ATOM 2228 N	LEU B 131	31.069	62.126	127.504	1.00	12.33
	ATOM 2229 CA	LEU B 131	31.949	62.279	126.350	1.00	9.91
	ATOM 2230 C	LEU B 131	31.824	61.033	125.526	1.00	11.50
	ATOM 2231 O	LEU B 131	31.653	59.948	126.077	1.00	19.47
	ATOM 2232 CB	LEU B 131	33.407	62.337	126.790	1.00	2.00
10	ATOM 2233 CG	LEU B 131	33.905	63.634	127.359	1.00	4.25
	ATOM 2234 CD1	LEU B 131	35.281	63.407	127.904	1.00	2.00
	ATOM 2235 CD2	LEU B 131	33.872	64.684	126.256	1.00	29.68
	ATOM 2236 N	TRP B 132	31.970	61.164	124.217	1.00	10.66
	ATOM 2237 CA	TRP B 132	31.915	59.996	123.349	1.00	15.29
15	ATOM 2238 C	TRP B 132	33.222	59.932	122.610	1.00	15.74
	ATOM 2239 O	TRP B 132	33.697	60.956	122.130	1.00	25.06
	ATOM 2240 CB	TRP B 132	30.748	60.076	122.371	1.00	10.35
	ATOM 2241 CG	TRP B 132	29.457	59.765	123.039	1.00	20.43
	ATOM 2242 CD1	TRP B 132	28.850	58.544	123.118	1.00	30.18
20	ATOM 2243 CD2	TRP B 132	28.645	60.666	123.792	1.00	11.83
	ATOM 2244 NE1	TRP B 132	27.723	58.630	123.883	1.00	25.16
	ATOM 2245 CE2	TRP B 132	27.570	59.923	124.308	1.00	8.64
	ATOM 2246 CE3	TRP B 132	28.723	62.036	124.083	1.00	14.84
	ATOM 2247 CZ2	TRP B 132	26.573	60.503	125.102	1.00	22.02
25	ATOM 2248 CZ3	TRP B 132	27.732	62.613	124.876	1.00	10.85

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		ATOM	2249	CH2	TRP	B	132	26.672	61.847	125.376	1.00	12.01
		ATOM	2250	N	LEU	B	133	33.827	58.749	122.565	1.00	12.08
		ATOM	2251	CA	LEU	B	133	35.107	58.565	121.886	1.00	8.35
		ATOM	2252	C	LEU	B	133	35.049	57.519	120.794	1.00	10.88
5		ATOM	2253	O	LEU	B	133	34.112	56.725	120.713	1.00	17.40
		ATOM	2254	CB	LEU	B	133	36.198	58.154	122.870	1.00	10.12
		ATOM	2255	CG	LEU	B	133	36.371	58.987	124.124	1.00	2.00
		ATOM	2256	CD1	LEU	B	133	37.351	58.329	125.034	1.00	2.00
		ATOM	2257	CD2	LEU	B	133	36.835	60.353	123.744	1.00	16.44
10		ATOM	2258	N	SER	B	134	36.100	57.506	119.988	1.00	10.30
		ATOM	2259	CA	SER	B	134	36.250	56.585	118.881	1.00	2.00
		ATOM	2260	C	SER	B	134	37.737	56.400	118.722	1.00	2.00
		ATOM	2261	O	SER	B	134	38.524	57.323	118.957	1.00	5.94
		ATOM	2262	CB	SER	B	134	35.692	57.225	117.615	1.00	2.00
15		ATOM	2263	OG	SER	B	134	36.254	56.678	116.433	1.00	31.68
		ATOM	2264	N	TRP	B	135	38.150	55.182	118.452	1.00	4.87
		ATOM	2265	CA	TRP	B	135	39.559	54.953	118.190	1.00	3.87
		ATOM	2266	C	TRP	B	135	39.732	53.790	117.239	1.00	9.39
		ATOM	2267	O	TRP	B	135	38.871	52.912	117.119	1.00	16.73
20		ATOM	2268	CB	TRP	B	135	40.388	54.778	119.466	1.00	4.82
		ATOM	2269	CG	TRP	B	135	40.020	53.627	120.328	1.00	9.79
		ATOM	2270	CD1	TRP	B	135	40.450	52.344	120.211	1.00	3.67
		ATOM	2271	CD2	TRP	B	135	39.135	53.650	121.444	1.00	6.25
		ATOM	2272	NE1	TRP	B	135	39.883	51.561	121.182	1.00	3.97
25		ATOM	2273	CE2	TRP	B	135	39.068	52.343	121.952	1.00	2.00

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		ATOM	2274	CE3	TRP	B	135	38.389	54.649	122.063	1.00	11.01
		ATOM	2275	CZ2	TRP	B	135	38.289	52.014	123.040	1.00	2.56
		ATOM	2276	CZ3	TRP	B	135	37.614	54.317	123.145	1.00	2.64
		ATOM	2277	CH2	TRP	B	135	37.570	53.015	123.621	1.00	11.02
5		ATOM	2278	N	LYS	B	136	40.773	53.899	116.443	1.00	9.08
		ATOM	2279	CA	LYS	B	136	41.138	52.890	115.474	1.00	4.95
		ATOM	2280	C	LYS	B	136	42.631	52.754	115.760	1.00	12.94
		ATOM	2281	O	LYS	B	136	43.269	53.672	116.312	1.00	13.45
		ATOM	2282	CB	LYS	B	136	40.939	53.414	114.042	1.00	7.30
10		ATOM	2283	CG	LYS	B	136	39.499	53.674	113.622	1.00	43.53
		ATOM	2284	CD	LYS	B	136	39.434	54.184	112.182	1.00	53.36
		ATOM	2285	CE	LYS	B	136	37.996	54.236	111.659	1.00	74.66
		ATOM	2286	NZ	LYS	B	136	37.346	52.887	111.607	1.00	81.62
		ATOM	2287	N	PRO	B	137	43.206	51.591	115.474	1.00	13.12
15		ATOM	2288	CA	PRO	B	137	44.634	51.461	115.734	1.00	7.62
		ATOM	2289	C	PRO	B	137	45.478	52.064	114.614	1.00	8.41
		ATOM	2290	O	PRO	B	137	44.985	52.462	113.554	1.00	16.22
		ATOM	2291	CB	PRO	B	137	44.821	49.960	115.814	1.00	5.96
		ATOM	2292	CG	PRO	B	137	43.855	49.466	114.832	1.00	2.00
20		ATOM	2293	CD	PRO	B	137	42.622	50.292	115.110	1.00	13.75
		ATOM	2294	N	TRP	B	138	46.767	52.119	114.872	1.00	6.99
		ATOM	2295	CA	TRP	B	138	47.719	52.666	113.945	1.00	3.90
		ATOM	2296	C	TRP	B	138	47.648	51.756	112.728	1.00	9.68
		ATOM	2297	O	TRP	B	138	48.024	50.583	112.816	1.00	15.38
25		ATOM	2298	CB	TRP	B	138	49.077	52.639	114.636	1.00	9.19

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		ATOM	2299	CG	TRP	B	138	50.170	53.117	113.817	1.00	9.89
		ATOM	2300	CD1	TRP	B	138	50.190	54.231	113.062	1.00	2.00
		ATOM	2301	CD2	TRP	B	138	51.409	52.458	113.606	1.00	12.32
		ATOM	2302	NE1	TRP	B	138	51.358	54.306	112.386	1.00	3.86
5		ATOM	2303	CE2	TRP	B	138	52.129	53.225	112.701	1.00	4.57
		ATOM	2304	CE3	TRP	B	138	51.977	51.279	114.097	1.00	13.45
		ATOM	2305	CZ2	TRP	B	138	53.393	52.862	112.265	1.00	13.20
		ATOM	2306	CZ3	TRP	B	138	53.233	50.918	113.667	1.00	2.00
		ATOM	2307	CH2	TRP	B	138	53.926	51.701	112.764	1.00	2.00
10		ATOM	2308	N	LYS	B	139	47.219	52.299	111.584	1.00	7.89
		ATOM	2309	CA	LYS	B	139	47.024	51.483	110.371	1.00	6.91
		ATOM	2310	C	LYS	B	139	48.052	50.413	109.984	1.00	2.00
		ATOM	2311	O	LYS	B	139	47.707	49.272	109.685	1.00	15.22
		ATOM	2312	CB	LYS	B	139	46.665	52.359	109.167	1.00	14.71
15		ATOM	2313	CG	LYS	B	139	45.827	51.614	108.136	1.00	21.39
		ATOM	2314	CD	LYS	B	139	44.969	52.554	107.325	1.00	53.52
		ATOM	2315	CE	LYS	B	139	43.769	51.818	106.730	1.00	72.83
		ATOM	2316	NZ	LYS	B	139	42.819	51.313	107.772	1.00	88.28
		ATOM	2317	N	PRO	B	140	49.321	50.763	109.972	1.00	2.00
20		ATOM	2318	CA	PRO	B	140	50.314	49.769	109.614	1.00	2.00
		ATOM	2319	C	PRO	B	140	50.271	48.534	110.509	1.00	2.00
		ATOM	2320	O	PRO	B	140	50.775	47.494	110.138	1.00	14.77
		ATOM	2321	CB	PRO	B	140	51.618	50.533	109.808	1.00	3.98
		ATOM	2322	CG	PRO	B	140	51.259	51.902	109.539	1.00	2.00
25		ATOM	2323	CD	PRO	B	140	49.959	52.056	110.239	1.00	6.02

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		ATOM	2324	N	SER	B	141	49.694	48.647	111.693	1.00	2.00
		ATOM	2325	CA	SER	B	141	49.644	47.500	112.586	1.00	2.00
		ATOM	2326	C	SER	B	141	48.249	46.922	112.760	1.00	8.89
		ATOM	2327	O	SER	B	141	48.051	46.083	113.628	1.00	9.14
5		ATOM	2328	CB	SER	B	141	50.157	47.889	113.961	1.00	2.25
		ATOM	2329	OG	SER	B	141	49.263	48.791	114.573	1.00	2.00
		ATOM	2330	N	GLU	B	142	47.295	47.332	111.926	1.00	9.08
		ATOM	2331	CA	GLU	B	142	45.930	46.855	112.056	1.00	2.00
		ATOM	2332	C	GLU	B	142	45.750	45.322	112.058	1.00	10.01
10		ATOM	2333	O	GLU	B	142	44.751	44.821	112.588	1.00	15.28
		ATOM	2334	CB	GLU	B	142	45.014	47.514	111.016	1.00	4.02
		ATOM	2335	CG	GLU	B	142	45.391	47.266	109.548	1.00	50.40
		ATOM	2336	CD	GLU	B	142	44.352	47.783	108.537	1.00	67.21
		ATOM	2337	OE1	GLU	B	142	43.278	48.282	108.958	1.00	68.17
15		ATOM	2338	OE2	GLU	B	142	44.617	47.676	107.311	1.00	77.63
		ATOM	2339	N	TYR	B	143	46.728	44.574	111.542	1.00	2.00
		ATOM	2340	CA	TYR	B	143	46.609	43.115	111.480	1.00	2.00
		ATOM	2341	C	TYR	B	143	46.958	42.422	112.781	1.00	9.26
		ATOM	2342	O	TYR	B	143	46.802	41.202	112.927	1.00	16.43
20		ATOM	2343	CB	TYR	B	143	47.479	42.536	110.369	1.00	2.75
		ATOM	2344	CG	TYR	B	143	48.951	42.651	110.632	1.00	2.00
		ATOM	2345	CD1	TYR	B	143	49.662	43.759	110.196	1.00	2.00
		ATOM	2346	CD2	TYR	B	143	49.610	41.701	111.402	1.00	10.96
		ATOM	2347	CE1	TYR	B	143	50.976	43.924	110.528	1.00	8.46
25		ATOM	2348	CE2	TYR	B	143	50.926	41.861	111.746	1.00	5.82

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	ATOM	2349	CZ	TYR	B	143	51.597	42.978	111.306	1.00	3.08
	ATOM	2350	OH	TYR	B	143	52.887	43.168	111.671	1.00	24.31
	ATOM	2351	N	MET	B	144	47.448	43.212	113.715	1.00	9.55
	ATOM	2352	CA	MET	B	144	47.868	42.737	115.012	1.00	8.64
5	ATOM	2353	C	MET	B	144	46.715	42.927	116.015	1.00	7.33
	ATOM	2354	O	MET	B	144	46.075	43.977	116.017	1.00	24.45
	ATOM	2355	CB	MET	B	144	49.082	43.568	115.371	1.00	2.00
	ATOM	2356	CG	MET	B	144	49.755	43.211	116.628	1.00	28.80
	ATOM	2357	SD	MET	B	144	51.218	44.221	116.800	1.00	26.57
10	ATOM	2358	CE	MET	B	144	51.891	44.098	115.098	1.00	11.90
	ATOM	2359	N	GLU	B	145	46.392	41.901	116.807	1.00	10.98
	ATOM	2360	CA	GLU	B	145	45.298	41.995	117.790	1.00	8.33
	ATOM	2361	C	GLU	B	145	45.935	42.769	118.913	1.00	7.41
	ATOM	2362	O	GLU	B	145	46.990	42.398	119.392	1.00	3.98
15	ATOM	2363	CB	GLU	B	145	44.866	40.604	118.284	1.00	14.96
	ATOM	2364	CG	GLU	B	145	43.470	40.513	118.895	1.00	50.90
	ATOM	2365	CD	GLU	B	145	42.356	40.215	117.878	1.00	74.80
	ATOM	2366	OE1	GLU	B	145	41.723	39.141	117.991	1.00	84.37
	ATOM	2367	OE2	GLU	B	145	42.088	41.058	116.992	1.00	88.79
20	ATOM	2368	N	GLN	B	146	45.337	43.889	119.287	1.00	17.22
	ATOM	2369	CA	GLN	B	146	45.899	44.723	120.349	1.00	6.41
	ATOM	2370	C	GLN	B	146	44.925	44.929	121.485	1.00	2.00
	ATOM	2371	O	GLN	B	146	43.723	44.695	121.344	1.00	10.08
	ATOM	2372	CB	GLN	B	146	46.356	46.081	119.791	1.00	2.00
25	ATOM	2373	CG	GLN	B	146	47.601	46.032	118.937	1.00	6.79

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		ATOM	2374	CD	GLN	B	146	47.664	47.184	117.991	1.00	4.82
		ATOM	2375	OE1	GLN	B	146	47.896	48.306	118.404	1.00	29.75
		ATOM	2376	NE2	GLN	B	146	47.409	46.932	116.718	1.00	25.35
		ATOM	2377	N	GLU	B	147	45.469	45.436	122.581	1.00	2.00
5		ATOM	2378	CA	GLU	B	147	44.761	45.709	123.836	1.00	2.00
		ATOM	2379	C	GLU	B	147	45.190	47.116	124.154	1.00	5.77
		ATOM	2380	O	GLU	B	147	46.380	47.429	124.028	1.00	11.71
		ATOM	2381	CB	GLU	B	147	45.328	44.771	124.922	1.00	13.12
		ATOM	2382	CG	GLU	B	147	44.691	44.779	126.295	1.00	33.61
10		ATOM	2383	CD	GLU	B	147	45.342	43.763	127.206	1.00	49.95
		ATOM	2384	OE1	GLU	B	147	44.893	42.591	127.213	1.00	72.33
		ATOM	2385	OE2	GLU	B	147	46.322	44.129	127.892	1.00	47.75
		ATOM	2386	N	CYS	B	148	44.247	47.950	124.591	1.00	5.39
		ATOM	2387	CA	CYS	B	148	44.546	49.342	124.917	1.00	13.34
15		ATOM	2388	C	CYS	B	148	44.151	49.801	126.324	1.00	10.08
		ATOM	2389	O	CYS	B	148	43.228	49.259	126.930	1.00	19.17
		ATOM	2390	CB	CYS	B	148	43.898	50.269	123.873	1.00	9.06
		ATOM	2391	SG	CYS	B	148	44.303	49.808	122.170	1.00	25.19
		ATOM	2392	N	GLU	B	149	44.884	50.789	126.831	1.00	2.00
20		ATOM	2393	CA	GLU	B	149	44.618	51.406	128.124	1.00	2.00
		ATOM	2394	C	GLU	B	149	44.260	52.846	127.764	1.00	5.06
		ATOM	2395	O	GLU	B	149	44.868	53.386	126.854	1.00	7.49
		ATOM	2396	CB	GLU	B	149	45.891	51.439	128.987	1.00	2.39
		ATOM	2397	CG	GLU	B	149	46.412	50.059	129.467	1.00	27.28
25		ATOM	2398	CD	GLU	B	149	47.630	50.138	130.407	1.00	16.92

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		ATOM	2399	OE1	GLU	B	149	47.934	49.142	131.108	1.00	31.15
		ATOM	2400	OE2	GLU	B	149	48.282	51.194	130.449	1.00	20.67
		ATOM	2401	N	LEU	B	150	43.252	53.436	128.409	1.00	2.00
		ATOM	2402	CA	LEU	B	150	42.871	54.839	128.184	1.00	2.00
5		ATOM	2403	C	LEU	B	150	43.058	55.534	129.501	1.00	2.00
		ATOM	2404	O	LEU	B	150	42.720	54.952	130.513	1.00	9.47
		ATOM	2405	CB	LEU	B	150	41.396	54.957	127.861	1.00	11.93
		ATOM	2406	CG	LEU	B	150	40.712	56.316	128.053	1.00	3.62
		ATOM	2407	CD1	LEU	B	150	41.159	57.286	126.992	1.00	10.70
10		ATOM	2408	CD2	LEU	B	150	39.229	56.126	127.950	1.00	2.00
		ATOM	2409	N	ARG	B	151	43.640	56.726	129.530	1.00	5.24
		ATOM	2410	CA	ARG	B	151	43.778	57.460	130.793	1.00	2.18
		ATOM	2411	C	ARG	B	151	43.113	58.821	130.640	1.00	7.80
		ATOM	2412	O	ARG	B	151	43.168	59.439	129.581	1.00	15.66
15		ATOM	2413	CB	ARG	B	151	45.233	57.601	131.297	1.00	2.00
		ATOM	2414	CG	ARG	B	151	46.240	57.979	130.256	1.00	2.34
		ATOM	2415	CD	ARG	B	151	47.266	59.037	130.655	1.00	4.38
		ATOM	2416	NE	ARG	B	151	48.571	58.559	131.102	1.00	3.33
		ATOM	2417	CZ	ARG	B	151	49.710	59.167	130.810	1.00	2.00
20		ATOM	2418	NH1	ARG	B	151	49.680	60.225	130.082	1.00	2.00
		ATOM	2419	NH2	ARG	B	151	50.877	58.762	131.264	1.00	15.85
		ATOM	2420	N	TYR	B	152	42.367	59.218	131.659	1.00	4.44
		ATOM	2421	CA	TYR	B	152	41.690	60.500	131.638	1.00	6.77
		ATOM	2422	C	TYR	B	152	41.755	61.217	132.970	1.00	7.25
25		ATOM	2423	O	TYR	B	152	41.809	60.592	134.019	1.00	16.04

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		ATOM	2424	CB	TYR	B	152	40.243	60.350	131.182	1.00	6.82
		ATOM	2425	CG	TYR	B	152	39.340	59.545	132.084	1.00	22.10
		ATOM	2426	CD1	TYR	B	152	39.102	58.188	131.838	1.00	24.81
		ATOM	2427	CD2	TYR	B	152	38.693	60.140	133.159	1.00	16.73
5		ATOM	2428	CE1	TYR	B	152	38.239	57.442	132.640	1.00	22.66
		ATOM	2429	CE2	TYR	B	152	37.834	59.399	133.971	1.00	38.40
		ATOM	2430	CZ	TYR	B	152	37.613	58.050	133.708	1.00	32.70
		ATOM	2431	OH	TYR	B	152	36.809	57.308	134.553	1.00	46.28
		ATOM	2432	N	GLN	B	153	41.832	62.535	132.918	1.00	6.24
10		ATOM	2433	CA	GLN	B	153	41.899	63.332	134.127	1.00	8.39
		ATOM	2434	C	GLN	B	153	41.258	64.678	133.894	1.00	9.48
		ATOM	2435	O	GLN	B	153	41.217	65.162	132.770	1.00	13.93
		ATOM	2436	CB	GLN	B	153	43.342	63.532	134.579	1.00	2.91
		ATOM	2437	CG	GLN	B	153	44.080	64.621	133.871	1.00	3.47
15		ATOM	2438	CD	GLN	B	153	45.517	64.717	134.310	1.00	14.79
		ATOM	2439	OE1	GLN	B	153	46.355	65.269	133.598	1.00	26.90
		ATOM	2440	NE2	GLN	B	153	45.821	64.169	135.483	1.00	23.46
		ATOM	2441	N	PRO	B	154	40.665	65.259	134.939	1.00	8.23
		ATOM	2442	CA	PRO	B	154	40.030	66.561	134.793	1.00	13.69
20		ATOM	2443	C	PRO	B	154	41.173	67.537	134.835	1.00	11.09
		ATOM	2444	O	PRO	B	154	42.162	67.271	135.515	1.00	6.21
		ATOM	2445	CB	PRO	B	154	39.191	66.652	136.063	1.00	11.52
		ATOM	2446	CG	PRO	B	154	40.057	65.995	137.059	1.00	4.49
		ATOM	2447	CD	PRO	B	154	40.557	64.782	136.328	1.00	2.00
25		ATOM	2448	N	GLN	B	155	41.082	68.631	134.091	1.00	13.40

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	ATOM 2449	CA	GLN B 155	42.152	69.616	134.117	1.00	14.49
	ATOM 2450	C	GLN B 155	42.091	70.372	135.447	1.00	18.68
	ATOM 2451	O	GLN B 155	41.266	71.277	135.601	1.00	16.75
	ATOM 2452	CB	GLN B 155	42.012	70.596	132.962	1.00	15.21
5	ATOM 2453	CG	GLN B 155	42.380	70.031	131.622	1.00	28.08
	ATOM 2454	CD	GLN B 155	42.654	71.117	130.615	1.00	44.22
	ATOM 2455	OE1	GLN B 155	41.798	71.957	130.338	1.00	58.11
	ATOM 2456	NE2	GLN B 155	43.868	71.131	130.082	1.00	67.60
	ATOM 2457	N	LEU B 156	42.959	70.005	136.397	1.00	26.27
10	ATOM 2458	CA	LEU B 156	42.981	70.645	137.720	1.00	35.51
	ATOM 2459	C	LEU B 156	44.318	70.725	138.471	1.00	45.46
	ATOM 2460	O	LEU B 156	45.390	70.436	137.935	1.00	48.41
	ATOM 2461	CB	LEU B 156	41.982	69.965	138.656	1.00	25.92
	ATOM 2462	CG	LEU B 156	40.496	69.952	138.343	1.00	20.84
15	ATOM 2463	CD1	LEU B 156	39.764	69.197	139.450	1.00	2.00
	ATOM 2464	CD2	LEU B 156	39.995	71.373	138.208	1.00	23.98
	ATOM 2465	N	LYS B 157	44.205	71.142	139.731	1.00	55.67
	ATOM 2466	CA	LYS B 157	45.314	71.282	140.657	1.00	68.92
	ATOM 2467	C	LYS B 157	45.848	69.877	140.915	1.00	70.60
20	ATOM 2468	O	LYS B 157	45.250	69.120	141.687	1.00	71.39
	ATOM 2469	CB	LYS B 157	44.790	71.882	141.972	1.00	78.15
	ATOM 2470	CG	LYS B 157	45.839	72.122	143.054	1.00	86.20
	ATOM 2471	CD	LYS B 157	45.238	72.119	144.468	1.00	96.36
	ATOM 2472	CE	LYS B 157	44.207	73.223	144.693	1.00	101.34
25	ATOM 2473	NZ	LYS B 157	42.931	73.010	143.949	1.00	109.54

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	ATOM 2474 N	GLY B 158	46.937	69.519	140.233	1.00	71.81
	ATOM 2475 CA	GLY B 158	47.532	68.199	140.405	1.00	66.72
	ATOM 2476 C	GLY B 158	46.489	67.108	140.266	1.00	63.99
	ATOM 2477 O	GLY B 158	46.151	66.404	141.225	1.00	58.04
5	ATOM 2478 N	ALA B 159	45.935	67.012	139.067	1.00	60.89
	ATOM 2479 CA	ALA B 159	44.909	66.031	138.792	1.00	56.21
	ATOM 2480 C	ALA B 159	45.511	64.644	138.853	1.00	53.42
	ATOM 2481 O	ALA B 159	46.698	64.462	138.594	1.00	52.55
	ATOM 2482 CB	ALA B 159	44.304	66.288	137.434	1.00	63.89
10	ATOM 2483 N	ASN B 160	44.686	63.665	139.184	1.00	50.54
	ATOM 2484 CA	ASN B 160	45.146	62.295	139.271	1.00	50.07
	ATOM 2485 C	ASN B 160	44.607	61.514	138.062	1.00	43.61
	ATOM 2486 O	ASN B 160	43.430	61.651	137.694	1.00	41.20
	ATOM 2487 CB	ASN B 160	44.640	61.686	140.581	1.00	75.70
15	ATOM 2488 CG	ASN B 160	45.516	60.558	141.079	1.00	94.77
	ATOM 2489 OD1	ASN B 160	46.727	60.558	140.864	1.00	104.80
	ATOM 2490 ND2	ASN B 160	44.910	59.594	141.760	1.00	103.59
	ATOM 2491 N	TRP B 161	45.469	60.722	137.424	1.00	31.08
	ATOM 2492 CA	TRP B 161	45.057	59.919	136.266	1.00	13.47
20	ATOM 2493 C	TRP B 161	44.115	58.783	136.653	1.00	8.95
	ATOM 2494 O	TRP B 161	44.410	58.000	137.553	1.00	22.81
	ATOM 2495 CB	TRP B 161	46.266	59.278	135.572	1.00	2.00
	ATOM 2496 CG	TRP B 161	46.999	60.141	134.628	1.00	2.00
	ATOM 2497 CD1	TRP B 161	48.341	60.391	134.621	1.00	8.25
25	ATOM 2498 CD2	TRP B 161	46.449	60.893	133.551	1.00	3.73

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	ATOM	2499	NE1	TRP	B	161	48.662	61.254	133.607	1.00	13.03
	ATOM	2500	CE2	TRP	B	161	47.515	61.582	132.937	1.00	6.68
	ATOM	2501	CE3	TRP	B	161	45.159	61.051	133.039	1.00	13.05
	ATOM	2502	CZ2	TRP	B	161	47.329	62.411	131.850	1.00	2.00
5	ATOM	2503	CZ3	TRP	B	161	44.980	61.874	131.953	1.00	2.00
	ATOM	2504	CH2	TRP	B	161	46.061	62.545	131.372	1.00	2.00
	ATOM	2505	N	THR	B	162	43.015	58.664	135.932	1.00	2.07
	ATOM	2506	CA	THR	B	162	42.052	57.593	136.157	1.00	6.42
	ATOM	2507	C	THR	B	162	42.219	56.646	134.968	1.00	16.67
10	ATOM	2508	O	THR	B	162	42.226	57.092	133.817	1.00	13.79
	ATOM	2509	CB	THR	B	162	40.612	58.137	136.160	1.00	11.07
	ATOM	2510	OG1	THR	B	162	40.421	59.013	137.286	1.00	37.13
	ATOM	2511	CG2	THR	B	162	39.604	56.997	136.187	1.00	4.95
	ATOM	2512	N	LEU	B	163	42.337	55.349	135.234	1.00	17.20
15	ATOM	2513	CA	LEU	B	163	42.521	54.391	134.155	1.00	6.32
	ATOM	2514	C	LEU	B	163	41.435	53.412	133.853	1.00	6.45
	ATOM	2515	O	LEU	B	163	40.650	53.017	134.717	1.00	25.38
	ATOM	2516	CB	LEU	B	163	43.794	53.601	134.340	1.00	2.40
	ATOM	2517	CG	LEU	B	163	45.012	54.405	133.948	1.00	9.76
20	ATOM	2518	CD1	LEU	B	163	45.721	54.869	135.194	1.00	14.39
	ATOM	2519	CD2	LEU	B	163	45.906	53.556	133.064	1.00	17.51
	ATOM	2520	N	VAL	B	164	41.429	53.018	132.589	1.00	3.99
	ATOM	2521	CA	VAL	B	164	40.506	52.039	132.055	1.00	5.95
	ATOM	2522	C	VAL	B	164	41.426	51.034	131.337	1.00	13.76
25	ATOM	2523	O	VAL	B	164	42.194	51.408	130.446	1.00	8.96

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		ATOM	2524	CB	VAL	B	164	39.543	52.686	131.082	1.00	6.35
		ATOM	2525	CG1	VAL	B	164	38.592	51.665	130.569	1.00	2.00
		ATOM	2526	CG2	VAL	B	164	38.794	53.828	131.751	1.00	4.71
		ATOM	2527	N	PHE	B	165	41.397	49.777	131.771	1.00	13.46
5		ATOM	2528	CA	PHE	B	165	42.260	48.752	131.206	1.00	2.00
		ATOM	2529	C	PHE	B	165	41.582	47.739	130.296	1.00	6.68
		ATOM	2530	O	PHE	B	165	40.361	47.581	130.281	1.00	10.32
		ATOM	2531	CB	PHE	B	165	42.915	47.959	132.320	1.00	5.54
		ATOM	2532	CG	PHE	B	165	43.680	48.783	133.297	1.00	5.51
10		ATOM	2533	CD1	PHE	B	165	45.011	48.983	133.163	1.00	2.00
		ATOM	2534	CD2	PHE	B	165	43.084	49.312	134.394	1.00	3.76
		ATOM	2535	CE1	PHE	B	165	45.732	49.708	134.115	1.00	2.00
		ATOM	2536	CE2	PHE	B	165	43.821	50.032	135.341	1.00	2.00
		ATOM	2537	CZ	PHE	B	165	45.133	50.222	135.194	1.00	2.00
15		ATOM	2538	N	HIS	B	166	42.412	47.002	129.574	1.00	2.00
		ATOM	2539	CA	HIS	B	166	41.943	45.948	128.702	1.00	5.82
		ATOM	2540	C	HIS	B	166	40.853	46.360	127.738	1.00	8.31
		ATOM	2541	O	HIS	B	166	39.828	45.686	127.602	1.00	20.83
		ATOM	2542	CB	HIS	B	166	41.520	44.751	129.550	1.00	10.22
20		ATOM	2543	CG	HIS	B	166	42.559	44.350	130.547	1.00	8.77
		ATOM	2544	ND1	HIS	B	166	43.723	43.708	130.186	1.00	24.25
		ATOM	2545	CD2	HIS	B	166	42.675	44.617	131.868	1.00	7.82
		ATOM	2546	CE1	HIS	B	166	44.518	43.609	131.237	1.00	8.18
		ATOM	2547	NE2	HIS	B	166	43.905	44.155	132.271	1.00	13.90
25		ATOM	2548	N	LEU	B	167	41.096	47.475	127.066	1.00	7.08

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		ATOM 2549	CA	LEU B 167	40.179	48.000	126.083	1.00	7.11
		ATOM 2550	C	LEU B 167	40.504	47.398	124.720	1.00	4.85
		ATOM 2551	O	LEU B 167	41.643	47.033	124.454	1.00	10.68
		ATOM 2552	CB	LEU B 167	40.343	49.510	126.014	1.00	2.00
5		ATOM 2553	CG	LEU B 167	39.645	50.281	127.106	1.00	2.00
		ATOM 2554	CD1	LEU B 167	39.974	51.725	126.956	1.00	2.00
		ATOM 2555	CD2	LEU B 167	38.176	50.068	126.980	1.00	2.00
		ATOM 2556	N	PRO B 168	39.493	47.240	123.855	1.00	2.00
		ATOM 2557	CA	PRO B 168	39.681	46.692	122.523	1.00	2.00
10		ATOM 2558	C	PRO B 168	40.480	47.629	121.655	1.00	6.81
		ATOM 2559	O	PRO B 168	40.568	48.831	121.921	1.00	13.62
		ATOM 2560	CB	PRO B 168	38.253	46.549	122.020	1.00	2.63
		ATOM 2561	CG	PRO B 168	37.502	47.544	122.789	1.00	2.00
		ATOM 2562	CD	PRO B 168	38.057	47.366	124.142	1.00	8.27
15		ATOM 2563	N	SER B 169	41.008	47.071	120.574	1.00	14.98
		ATOM 2564	CA	SER B 169	41.850	47.811	119.654	1.00	8.32
		ATOM 2565	C	SER B 169	41.127	48.933	118.924	1.00	9.70
		ATOM 2566	O	SER B 169	41.766	49.898	118.497	1.00	14.22
		ATOM 2567	CB	SER B 169	42.496	46.840	118.679	1.00	10.10
20		ATOM 2568	OG	SER B 169	43.652	47.422	118.114	1.00	49.34
		ATOM 2569	N	SER B 170	39.809	48.788	118.757	1.00	2.00
		ATOM 2570	CA	SER B 170	38.999	49.801	118.099	1.00	4.44
		ATOM 2571	C	SER B 170	37.589	49.812	118.678	1.00	5.45
		ATOM 2572	O	SER B 170	37.096	48.787	119.149	1.00	13.72
25		ATOM 2573	CB	SER B 170	38.954	49.573	116.595	1.00	2.00

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		ATOM 2574	OG	SER B	170	38.234	48.404	116.304	1.00	25.98
		ATOM 2575	N	LYS B	171	36.977	50.994	118.674	1.00	9.67
		ATOM 2576	CA	LYS B	171	35.631	51.227	119.191	1.00	9.01
		ATOM 2577	C	LYS B	171	35.002	52.306	118.316	1.00	17.36
5		ATOM 2578	O	LYS B	171	35.627	53.335	118.052	1.00	19.66
		ATOM 2579	CB	LYS B	171	35.690	51.728	120.644	1.00	12.55
		ATOM 2580	CG	LYS B	171	35.338	50.700	121.685	1.00	13.53
		ATOM 2581	CD	LYS B	171	33.869	50.350	121.619	1.00	20.58
		ATOM 2582	CE	LYS B	171	33.583	49.022	122.312	1.00	45.32
10		ATOM 2583	NZ	LYS B	171	32.242	48.477	121.937	1.00	60.68
		ATOM 2584	N	ASP B	172	33.794	52.050	117.827	1.00	29.11
		ATOM 2585	CA	ASP B	172	33.106	53.016	116.986	1.00	31.34
		ATOM 2586	C	ASP B	172	32.631	54.179	117.845	1.00	27.78
		ATOM 2587	O	ASP B	172	32.820	55.329	117.483	1.00	36.04
15		ATOM 2588	CB	ASP B	172	31.954	52.350	116.244	1.00	48.96
		ATOM 2589	CG	ASP B	172	32.434	51.323	115.227	1.00	67.00
		ATOM 2590	OD1	ASP B	172	33.450	51.589	114.541	1.00	69.29
		ATOM 2591	OD2	ASP B	172	31.795	50.250	115.117	1.00	83.81
		ATOM 2592	N	GLN B	173	32.014	53.873	118.980	1.00	21.00
20		ATOM 2593	CA	GLN B	173	31.557	54.888	119.922	1.00	11.45
		ATOM 2594	C	GLN B	173	31.650	54.259	121.289	1.00	9.28
		ATOM 2595	O	GLN B	173	31.167	53.160	121.504	1.00	31.16
		ATOM 2596	CB	GLN B	173	30.126	55.354	119.663	1.00	11.39
		ATOM 2597	CG	GLN B	173	29.092	54.276	119.771	1.00	48.22
25		ATOM 2598	CD	GLN B	173	27.863	54.732	120.514	1.00	60.72

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		ATOM	2599	OE1	GLN	B	173	26.835	55.015	119.908	1.00	73.75
		ATOM	2600	NE2	GLN	B	173	27.959	54.797	121.836	1.00	64.53
		ATOM	2601	N	PHE	B	174	32.315	54.953	122.198	1.00	11.52
		ATOM	2602	CA	PHE	B	174	32.535	54.492	123.562	1.00	5.52
5		ATOM	2603	C	PHE	B	174	32.140	55.639	124.452	1.00	9.57
		ATOM	2604	O	PHE	B	174	32.731	56.710	124.383	1.00	10.40
		ATOM	2605	CB	PHE	B	174	34.014	54.182	123.735	1.00	9.95
		ATOM	2606	CG	PHE	B	174	34.430	53.934	125.137	1.00	2.00
		ATOM	2607	CD1	PHE	B	174	34.269	52.690	125.713	1.00	16.77
10		ATOM	2608	CD2	PHE	B	174	35.061	54.912	125.859	1.00	7.89
		ATOM	2609	CE1	PHE	B	174	34.745	52.427	126.995	1.00	2.00
		ATOM	2610	CE2	PHE	B	174	35.541	54.662	127.147	1.00	8.43
		ATOM	2611	CZ	PHE	B	174	35.380	53.417	127.706	1.00	2.00
		ATOM	2612	N	GLU	B	175	31.097	55.428	125.244	1.00	17.83
15		ATOM	2613	CA	GLU	B	175	30.579	56.456	126.141	1.00	12.44
		ATOM	2614	C	GLU	B	175	31.255	56.420	127.502	1.00	9.49
		ATOM	2615	O	GLU	B	175	31.312	55.376	128.153	1.00	27.43
		ATOM	2616	CB	GLU	B	175	29.090	56.252	126.282	1.00	20.18
		ATOM	2617	CG	GLU	B	175	28.367	57.292	127.075	1.00	34.30
20		ATOM	2618	CD	GLU	B	175	26.885	56.941	127.259	1.00	44.98
		ATOM	2619	OE1	GLU	B	175	26.135	56.901	126.244	1.00	26.62
		ATOM	2620	OE2	GLU	B	175	26.483	56.692	128.423	1.00	48.08
		ATOM	2621	N	LEU	B	176	31.824	57.543	127.898	1.00	2.00
		ATOM	2622	CA	LEU	B	176	32.504	57.645	129.172	1.00	6.37
25		ATOM	2623	C	LEU	B	176	31.739	58.734	129.921	1.00	9.92

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		ATOM 2624 O	LEU B 176	31.621	59.815	129.407	1.00	13.63
		ATOM 2625 CB	LEU B 176	33.954	58.055	128.934	1.00	2.00
		ATOM 2626 CG	LEU B 176	34.775	58.321	130.184	1.00	13.41
		ATOM 2627 CD1	LEU B 176	35.012	57.035	130.983	1.00	12.42
5		ATOM 2628 CD2	LEU B 176	36.082	58.931	129.758	1.00	17.97
		ATOM 2629 N	CYS B 177	31.141	58.451	131.080	1.00	18.37
		ATOM 2630 CA	CYS B 177	30.359	59.478	131.796	1.00	12.04
		ATOM 2631 C	CYS B 177	30.698	59.632	133.282	1.00	21.88
		ATOM 2632 O	CYS B 177	31.560	58.913	133.815	1.00	25.38
10		ATOM 2633 CB	CYS B 177	28.835	59.213	131.688	1.00	16.23
		ATOM 2634 SG	CYS B 177	27.970	59.310	130.072	1.00	44.29
		ATOM 2635 N	GLY B 178	29.952	60.522	133.951	1.00	18.10
		ATOM 2636 CA	GLY B 178	30.167	60.784	135.369	1.00	28.30
		ATOM 2637 C	GLY B 178	31.349	61.721	135.611	1.00	33.59
15		ATOM 2638 O	GLY B 178	31.865	61.848	136.738	1.00	44.90
		ATOM 2639 N	LEU B 179	31.696	62.464	134.563	1.00	27.86
		ATOM 2640 CA	LEU B 179	32.812	63.398	134.577	1.00	20.54
		ATOM 2641 C	LEU B 179	32.375	64.785	135.033	1.00	17.35
		ATOM 2642 O	LEU B 179	32.138	65.661	134.208	1.00	10.03
20		ATOM 2643 CB	LEU B 179	33.430	63.433	133.176	1.00	14.04
		ATOM 2644 CG	LEU B 179	33.791	62.036	132.633	1.00	3.10
		ATOM 2645 CD1	LEU B 179	34.328	62.121	131.247	1.00	2.00
		ATOM 2646 CD2	LEU B 179	34.802	61.343	133.495	1.00	17.59
		ATOM 2647 N	HIS B 180	32.321	64.975	136.357	1.00	20.68
25		ATOM 2648 CA	HIS B 180	31.863	66.228	136.960	1.00	15.95

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		ATOM 2649 C	HIS B 180	32.879	67.114	137.651	1.00	21.11
		ATOM 2650 O	HIS B 180	32.505	68.145	138.196	1.00	43.58
		ATOM 2651 CB	HIS B 180	30.773	65.939	137.979	1.00	12.05
		ATOM 2652 CG	HIS B 180	29.667	65.095	137.450	1.00	17.57
5		ATOM 2653 ND1	HIS B 180	29.498	63.775	137.816	1.00	25.99
		ATOM 2654 CD2	HIS B 180	28.673	65.377	136.576	1.00	19.72
		ATOM 2655 CE1	HIS B 180	28.445	63.279	137.190	1.00	25.66
		ATOM 2656 NE2	HIS B 180	27.928	64.229	136.431	1.00	33.29
		ATOM 2657 N	GLN B 181	34.145	66.728	137.663	1.00	9.52
10		ATOM 2658 CA	GLN B 181	35.147	67.521	138.355	1.00	3.53
		ATOM 2659 C	GLN B 181	35.657	68.775	137.652	1.00	12.98
		ATOM 2660 O	GLN B 181	36.336	69.589	138.274	1.00	24.60
		ATOM 2661 CB	GLN B 181	36.339	66.651	138.767	1.00	15.29
		ATOM 2662 CG	GLN B 181	36.100	65.740	139.959	1.00	10.54
15		ATOM 2663 CD	GLN B 181	37.343	64.951	140.374	1.00	33.72
		ATOM 2664 OE1	GLN B 181	38.057	65.343	141.299	1.00	38.11
		ATOM 2665 NE2	GLN B 181	37.583	63.817	139.711	1.00	34.51
		ATOM 2666 N	ALA B 182	35.372	68.945	136.367	1.00	12.48
		ATOM 2667 CA	ALA B 182	35.858	70.131	135.670	1.00	5.60
20		ATOM 2668 C	ALA B 182	35.242	70.280	134.303	1.00	10.20
		ATOM 2669 O	ALA B 182	34.617	69.358	133.797	1.00	19.58
		ATOM 2670 CB	ALA B 182	37.366	70.090	135.559	1.00	2.00
		ATOM 2671 N	PRO B 183	35.389	71.463	133.694	1.00	12.91
		ATOM 2672 CA	PRO B 183	34.842	71.731	132.369	1.00	12.07
25		ATOM 2673 C	PRO B 183	35.657	71.097	131.251	1.00	7.41

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		ATOM 2674 O	PRO B 183	35.193	71.016	130.117	1.00	25.73
		ATOM 2675 CB	PRO B 183	34.898	73.257	132.288	1.00	4.40
		ATOM 2676 CG	PRO B 183	36.112	73.576	133.040	1.00	14.37
		ATOM 2677 CD	PRO B 183	35.941	72.700	134.262	1.00	7.74
5		ATOM 2678 N	VAL B 184	36.885	70.687	131.556	1.00	3.34
		ATOM 2679 CA	VAL B 184	37.745	70.082	130.545	1.00	2.00
		ATOM 2680 C	VAL B 184	38.528	68.918	131.123	1.00	5.16
		ATOM 2681 O	VAL B 184	39.031	68.984	132.253	1.00	8.76
		ATOM 2682 CB	VAL B 184	38.742	71.111	129.919	1.00	2.00
10		ATOM 2683 CG1	VAL B 184	39.566	70.472	128.872	1.00	7.96
		ATOM 2684 CG2	VAL B 184	38.015	72.224	129.255	1.00	8.78
		ATOM 2685 N	TYR B 185	38.587	67.840	130.347	1.00	4.29
		ATOM 2686 CA	TYR B 185	39.319	66.646	130.694	1.00	2.67
		ATOM 2687 C	TYR B 185	40.350	66.356	129.596	1.00	6.37
15		ATOM 2688 O	TYR B 185	40.163	66.743	128.446	1.00	14.36
		ATOM 2689 CB	TYR B 185	38.348	65.477	130.809	1.00	5.86
		ATOM 2690 CG	TYR B 185	37.642	65.377	132.144	1.00	15.11
		ATOM 2691 CD1	TYR B 185	36.568	66.227	132.470	1.00	13.02
		ATOM 2692 CD2	TYR B 185	38.014	64.403	133.074	1.00	18.79
20		ATOM 2693 CE1	TYR B 185	35.879	66.092	133.695	1.00	11.83
		ATOM 2694 CE2	TYR B 185	37.338	64.266	134.296	1.00	27.83
		ATOM 2695 CZ	TYR B 185	36.276	65.107	134.595	1.00	22.91
		ATOM 2696 OH	TYR B 185	35.612	64.937	135.784	1.00	30.75
		ATOM 2697 N	THR B 186	41.457	65.722	129.960	1.00	6.00
25		ATOM 2698 CA	THR B 186	42.475	65.338	128.994	1.00	5.13

		ATOM 2699	C	THR	B	186	42.422	63.822	128.868	1.00	4.49
		ATOM 2700	O	THR	B	186	42.304	63.135	129.871	1.00	10.53
		ATOM 2701	CB	THR	B	186	43.843	65.698	129.473	1.00	2.10
		ATOM 2702	OG1	THR	B	186	43.917	67.119	129.672	1.00	18.74
5		ATOM 2703	CG2	THR	B	186	44.866	65.249	128.460	1.00	2.00
		ATOM 2704	N	LEU	B	187	42.479	63.296	127.655	1.00	2.00
		ATOM 2705	CA	LEU	B	187	42.437	61.858	127.480	1.00	2.00
		ATOM 2706	C	LEU	B	187	43.545	61.433	126.554	1.00	2.00
		ATOM 2707	O	LEU	B	187	43.945	62.183	125.678	1.00	13.31
10		ATOM 2708	CB	LEU	B	187	41.112	61.407	126.892	1.00	2.54
		ATOM 2709	CG	LEU	B	187	39.823	61.733	127.632	1.00	2.26
		ATOM 2710	CD1	LEU	B	187	39.472	63.156	127.442	1.00	2.00
		ATOM 2711	CD2	LEU	B	187	38.728	60.913	127.080	1.00	2.45
		ATOM 2712	N	GLN	B	188	44.069	60.243	126.785	1.00	5.96
15		ATOM 2713	CA	GLN	B	188	45.147	59.675	125.981	1.00	5.38
		ATOM 2714	C	GLN	B	188	44.933	58.181	125.979	1.00	8.87
		ATOM 2715	O	GLN	B	188	44.242	57.650	126.845	1.00	17.32
		ATOM 2716	CB	GLN	B	188	46.510	59.970	126.585	1.00	7.58
		ATOM 2717	CG	GLN	B	188	46.936	61.422	126.561	1.00	2.00
20		ATOM 2718	CD	GLN	B	188	48.284	61.599	127.186	1.00	2.00
		ATOM 2719	OE1	GLN	B	188	48.415	61.577	128.392	1.00	5.06
		ATOM 2720	NE2	GLN	B	188	49.300	61.703	126.373	1.00	2.00
		ATOM 2721	N	MET	B	189	45.521	57.507	125.008	1.00	2.42
		ATOM 2722	CA	MET	B	189	45.369	56.086	124.879	1.00	2.00
25		ATOM 2723	C	MET	B	189	46.646	55.528	124.281	1.00	2.00

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		ATOM 2724 O	MET B 189	47.325	56.217	123.532	1.00	11.90
		ATOM 2725 CB	MET B 189	44.175	55.817	123.977	1.00	2.00
		ATOM 2726 CG	MET B 189	43.801	54.370	123.846	1.00	14.17
		ATOM 2727 SD	MET B 189	42.275	54.142	122.996	1.00	21.80
5		ATOM 2728 CE	MET B 189	41.285	55.079	123.989	1.00	7.15
		ATOM 2729 N	ARG B 190	47.021	54.315	124.689	1.00	6.29
		ATOM 2730 CA	ARG B 190	48.225	53.620	124.195	1.00	2.00
		ATOM 2731 C	ARG B 190	47.830	52.172	123.986	1.00	2.00
		ATOM 2732 O	ARG B 190	46.907	51.698	124.620	1.00	3.11
10		ATOM 2733 CB	ARG B 190	49.359	53.698	125.219	1.00	2.00
		ATOM 2734 CG	ARG B 190	49.371	52.576	126.211	1.00	2.00
		ATOM 2735 CD	ARG B 190	49.779	52.946	127.611	1.00	2.00
		ATOM 2736 NE	ARG B 190	51.183	52.747	127.934	1.00	7.73
		ATOM 2737 CZ	ARG B 190	51.611	52.178	129.056	1.00	7.46
15		ATOM 2738 NH1	ARG B 190	50.744	51.736	129.936	1.00	2.00
		ATOM 2739 NH2	ARG B 190	52.902	52.140	129.343	1.00	12.30
		ATOM 2740 N	CYS B 191	48.533	51.455	123.128	1.00	2.18
		ATOM 2741 CA	CYS B 191	48.182	50.073	122.877	1.00	2.00
		ATOM 2742 C	CYS B 191	49.384	49.176	122.885	1.00	2.00
20		ATOM 2743 O	CYS B 191	50.530	49.641	122.911	1.00	4.30
		ATOM 2744 CB	CYS B 191	47.415	49.960	121.560	1.00	2.00
		ATOM 2745 SG	CYS B 191	45.876	50.972	121.547	1.00	49.26
		ATOM 2746 N	ILE B 192	49.115	47.884	122.983	1.00	2.00
		ATOM 2747 CA	ILE B 192	50.161	46.873	122.985	1.00	2.09
25		ATOM 2748 C	ILE B 192	49.649	45.604	122.299	1.00	9.04

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		ATOM 2749 O	ILE B 192	48.436	45.376	122.209	1.00	13.56
		ATOM 2750 CB	ILE B 192	50.637	46.548	124.429	1.00	2.46
		ATOM 2751 CG1	ILE B 192	51.998	45.852	124.399	1.00	9.27
		ATOM 2752 CG2	ILE B 192	49.621	45.708	125.164	1.00	2.00
5		ATOM 2753 CD1	ILE B 192	52.539	45.542	125.746	1.00	3.78
		ATOM 2754 N	ARG B 193	50.575	44.786	121.814	1.00	4.67
		ATOM 2755 CA	ARG B 193	50.236	43.543	121.139	1.00	6.14
		ATOM 2756 C	ARG B 193	49.589	42.627	122.134	1.00	5.72
		ATOM 2757 O	ARG B 193	50.109	42.429	123.219	1.00	6.30
10		ATOM 2758 CB	ARG B 193	51.487	42.889	120.587	1.00	2.00
		ATOM 2759 CG	ARG B 193	51.224	41.815	119.578	1.00	2.00
		ATOM 2760 CD	ARG B 193	52.538	41.242	119.201	1.00	2.00
		ATOM 2761 NE	ARG B 193	52.489	40.258	118.131	1.00	13.50
		ATOM 2762 CZ	ARG B 193	53.473	39.400	117.879	1.00	13.73
15		ATOM 2763 NH1	ARG B 193	54.564	39.393	118.634	1.00	15.41
		ATOM 2764 NH2	ARG B 193	53.404	38.605	116.822	1.00	16.03
		ATOM 2765 N	SER B 194	48.491	42.016	121.735	1.00	3.34
		ATOM 2766 CA	SER B 194	47.745	41.163	122.628	1.00	7.33
		ATOM 2767 C	SER B 194	48.245	39.737	122.642	1.00	13.88
20		ATOM 2768 O	SER B 194	48.429	39.133	121.589	1.00	23.98
		ATOM 2769 CB	SER B 194	46.255	41.214	122.246	1.00	4.97
		ATOM 2770 OG	SER B 194	45.409	40.832	123.311	1.00	33.74
		ATOM 2771 N	SER B 195	48.508	39.231	123.847	1.00	18.44
		ATOM 2772 CA	SER B 195	48.941	37.847	124.085	1.00	10.99
25		ATOM 2773 C	SER B 195	50.301	37.395	123.569	1.00	14.50

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		ATOM 2774 O	SER B 195	50.670	36.221	123.704	1.00	24.77
		ATOM 2775 CB	SER B 195	47.879	36.881	123.565	1.00	9.88
		ATOM 2776 OG	SER B 195	46.577	37.289	123.962	1.00	35.16
		ATOM 2777 N	LEU B 196	51.035	38.294	122.940	1.00	6.46
5		ATOM 2778 CA	LEU B 196	52.331	37.934	122.433	1.00	2.79
		ATOM 2779 C	LEU B 196	53.303	39.022	122.827	1.00	6.51
		ATOM 2780 O	LEU B 196	52.932	40.047	123.371	1.00	21.37
		ATOM 2781 CB	LEU B 196	52.275	37.773	120.918	1.00	3.71
		ATOM 2782 CG	LEU B 196	51.584	36.563	120.300	1.00	2.00
10		ATOM 2783 CD1	LEU B 196	51.300	36.811	118.848	1.00	2.00
		ATOM 2784 CD2	LEU B 196	52.459	35.365	120.450	1.00	2.00
		ATOM 2785 N	PRO B 197	54.580	38.782	122.605	1.00	7.13
		ATOM 2786 CA	PRO B 197	55.605	39.761	122.947	1.00	2.00
		ATOM 2787 C	PRO B 197	55.540	41.091	122.193	1.00	6.20
15		ATOM 2788 O	PRO B 197	55.455	41.120	120.968	1.00	13.60
		ATOM 2789 CB	PRO B 197	56.891	39.002	122.636	1.00	2.00
		ATOM 2790 CG	PRO B 197	56.530	37.605	122.962	1.00	2.00
		ATOM 2791 CD	PRO B 197	55.186	37.476	122.307	1.00	7.79
		ATOM 2792 N	GLY B 198	55.641	42.187	122.937	1.00	3.15
20		ATOM 2793 CA	GLY B 198	55.616	43.499	122.332	1.00	2.00
		ATOM 2794 C	GLY B 198	55.732	44.576	123.375	1.00	7.95
		ATOM 2795 O	GLY B 198	55.448	44.331	124.539	1.00	22.48
		ATOM 2796 N	PHE B 199	56.197	45.750	122.977	1.00	11.03
		ATOM 2797 CA	PHE B 199	56.339	46.859	123.907	1.00	13.76
25		ATOM 2798 C	PHE B 199	55.078	47.715	123.805	1.00	12.80

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	ATOM 2799 O	PHE B 199	54.344	47.612	122.836	1.00	10.06
	ATOM 2800 CB	PHE B 199	57.545	47.712	123.524	1.00	15.46
	ATOM 2801 CG	PHE B 199	58.799	46.938	123.363	1.00	35.50
	ATOM 2802 CD1	PHE B 199	59.521	46.525	124.484	1.00	33.77
5	ATOM 2803 CD2	PHE B 199	59.267	46.617	122.084	1.00	37.75
	ATOM 2804 CE1	PHE B 199	60.694	45.803	124.338	1.00	40.01
	ATOM 2805 CE2	PHE B 199	60.446	45.893	121.919	1.00	41.48
	ATOM 2806 CZ	PHE B 199	61.164	45.482	123.050	1.00	52.50
	ATOM 2807 N	TRP B 200	54.810	48.541	124.809	1.00	10.18
10	ATOM 2808 CA	TRP B 200	53.647	49.412	124.744	1.00	2.00
	ATOM 2809 C	TRP B 200	53.973	50.500	123.762	1.00	2.58
	ATOM 2810 O	TRP B 200	55.148	50.810	123.533	1.00	14.20
	ATOM 2811 CB	TRP B 200	53.406	50.103	126.072	1.00	3.79
	ATOM 2812 CG	TRP B 200	52.626	49.341	127.060	1.00	3.20
15	ATOM 2813 CD1	TRP B 200	53.099	48.736	128.182	1.00	2.00
	ATOM 2814 CD2	TRP B 200	51.209	49.140	127.058	1.00	2.00
	ATOM 2815 NE1	TRP B 200	52.057	48.175	128.884	1.00	8.62
	ATOM 2816 CE2	TRP B 200	50.890	48.410	128.213	1.00	2.00
	ATOM 2817 CE3	TRP B 200	50.179	49.506	126.190	1.00	13.27
20	ATOM 2818 CZ2	TRP B 200	49.589	48.042	128.518	1.00	2.22
	ATOM 2819 CZ3	TRP B 200	48.880	49.139	126.503	1.00	2.00
	ATOM 2820 CH2	TRP B 200	48.601	48.418	127.651	1.00	2.00
	ATOM 2821 N	SER B 201	52.942	51.076	123.168	1.00	2.00
	ATOM 2822 CA	SER B 201	53.140	52.190	122.257	1.00	2.00
25	ATOM 2823 C	SER B 201	53.228	53.445	123.129	1.00	3.13

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5	ATOM 2824 O	SER B 201	52.919	53.417	124.316	1.00	12.79
	ATOM 2825 CB	SER B 201	51.918	52.359	121.385	1.00	7.15
	ATOM 2826 OG	SER B 201	50.886	52.990	122.120	1.00	8.11
	ATOM 2827 N	PRO B 202	53.611	54.582	122.552	1.00	9.82
	ATOM 2828 CA	PRO B 202	53.675	55.773	123.404	1.00	2.64
10	ATOM 2829 C	PRO B 202	52.232	56.195	123.627	1.00	5.86
	ATOM 2830 O	PRO B 202	51.340	55.736	122.917	1.00	14.77
	ATOM 2831 CB	PRO B 202	54.373	56.781	122.500	1.00	4.76
	ATOM 2832 CG	PRO B 202	55.110	55.947	121.512	1.00	2.00
	ATOM 2833 CD	PRO B 202	54.153	54.865	121.215	1.00	11.99
15	ATOM 2834 N	TRP B 203	51.968	57.041	124.610	1.00	7.63
	ATOM 2835 CA	TRP B 203	50.590	57.469	124.795	1.00	2.00
	ATOM 2836 C	TRP B 203	50.317	58.466	123.674	1.00	4.43
	ATOM 2837 O	TRP B 203	51.180	59.265	123.310	1.00	11.22
	ATOM 2838 CB	TRP B 203	50.379	58.175	126.140	1.00	2.00
20	ATOM 2839 CG	TRP B 203	50.351	57.321	127.374	1.00	2.00
	ATOM 2840 CD1	TRP B 203	51.389	57.067	128.205	1.00	2.00
	ATOM 2841 CD2	TRP B 203	49.233	56.603	127.902	1.00	2.00
	ATOM 2842 NE1	TRP B 203	50.999	56.221	129.210	1.00	2.00
	ATOM 2843 CE2	TRP B 203	49.678	55.921	129.043	1.00	2.00
25	ATOM 2844 CE3	TRP B 203	47.909	56.459	127.514	1.00	2.00
	ATOM 2845 CZ2	TRP B 203	48.851	55.109	129.793	1.00	2.00
	ATOM 2846 CZ3	TRP B 203	47.087	55.645	128.265	1.00	7.25
	ATOM 2847 CH2	TRP B 203	47.564	54.981	129.392	1.00	2.00
	ATOM 2848 N	SER B 204	49.120	58.415	123.121	1.00	7.50

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	ATOM 2849 CA	SER B 204	48.714	59.337	122.076	1.00	2.00
	ATOM 2850 C	SER B 204	48.709	60.763	122.632	1.00	3.84
	ATOM 2851 O	SER B 204	48.651	60.961	123.844	1.00	2.61
	ATOM 2852 CB	SER B 204	47.295	58.973	121.620	1.00	2.00
5	ATOM 2853 OG	SER B 204	46.356	59.101	122.685	1.00	7.30
	ATOM 2854 N	PRO B 205	48.837	61.773	121.759	1.00	8.07
	ATOM 2855 CA	PRO B 205	48.825	63.171	122.191	1.00	2.00
	ATOM 2856 C	PRO B 205	47.512	63.505	122.887	1.00	3.80
	ATOM 2857 O	PRO B 205	46.434	63.124	122.433	1.00	13.77
10	ATOM 2858 CB	PRO B 205	48.966	63.925	120.877	1.00	6.99
	ATOM 2859 CG	PRO B 205	48.573	62.929	119.836	1.00	5.70
	ATOM 2860 CD	PRO B 205	49.201	61.693	120.340	1.00	9.91
	ATOM 2861 N	GLY B 206	47.619	64.196	124.007	1.00	9.50
	ATOM 2862 CA	GLY B 206	46.452	64.530	124.797	1.00	2.03
15	ATOM 2863 C	GLY B 206	45.301	65.173	124.076	1.00	5.21
	ATOM 2864 O	GLY B 206	45.490	66.105	123.311	1.00	20.52
	ATOM 2865 N	LEU B 207	44.112	64.631	124.287	1.00	5.28
	ATOM 2866 CA	LEU B 207	42.899	65.168	123.705	1.00	2.00
	ATOM 2867 C	LEU B 207	42.353	65.942	124.858	1.00	2.47
20	ATOM 2868 O	LEU B 207	42.366	65.453	125.972	1.00	14.01
	ATOM 2869 CB	LEU B 207	41.879	64.078	123.401	1.00	2.00
	ATOM 2870 CG	LEU B 207	41.512	63.735	121.970	1.00	2.00
	ATOM 2871 CD1	LEU B 207	40.282	62.834	121.992	1.00	2.00
	ATOM 2872 CD2	LEU B 207	41.217	64.990	121.223	1.00	23.41
25	ATOM 2873 N	GLN B 208	41.900	67.157	124.598	1.00	13.33

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		ATOM 2874	CA	GLN B 208	41.297	68.009	125.608	1.00	2.00
		ATOM 2875	C	GLN B 208	39.856	68.172	125.167	1.00	8.08
		ATOM 2876	O	GLN B 208	39.564	68.873	124.202	1.00	13.13
		ATOM 2877	CB	GLN B 208	42.012	69.342	125.656	1.00	2.00
5		ATOM 2878	CG	GLN B 208	43.407	69.190	126.194	1.00	25.33
		ATOM 2879	CD	GLN B 208	44.170	70.493	126.275	1.00	43.42
		ATOM 2880	OE1	GLN B 208	43.635	71.540	126.670	1.00	44.96
		ATOM 2881	NE2	GLN B 208	45.445	70.436	125.907	1.00	66.36
		ATOM 2882	N	LEU B 209	38.966	67.462	125.843	1.00	6.60
10		ATOM 2883	CA	LEU B 209	37.551	67.463	125.497	1.00	5.55
		ATOM 2884	C	LEU B 209	36.681	68.023	126.603	1.00	8.82
		ATOM 2885	O	LEU B 209	36.985	67.870	127.784	1.00	15.03
		ATOM 2886	CB	LEU B 209	37.098	66.030	125.162	1.00	8.34
		ATOM 2887	CG	LEU B 209	37.786	65.412	123.947	1.00	23.33
15		ATOM 2888	CD1	LEU B 209	37.345	64.005	123.758	1.00	15.88
		ATOM 2889	CD2	LEU B 209	37.493	66.237	122.711	1.00	33.54
		ATOM 2890	N	ARG B 210	35.606	68.692	126.221	1.00	8.51
		ATOM 2891	CA	ARG B 210	34.708	69.263	127.202	1.00	6.02
		ATOM 2892	C	ARG B 210	33.565	68.300	127.345	1.00	7.09
20		ATOM 2893	O	ARG B 210	32.995	67.850	126.336	1.00	11.32
		ATOM 2894	CB	ARG B 210	34.154	70.629	126.731	1.00	10.42
		ATOM 2895	CG	ARG B 210	35.095	71.852	126.887	1.00	29.95
		ATOM 2896	CD	ARG B 210	34.432	73.202	126.479	1.00	19.51
		ATOM 2897	NE	ARG B 210	35.279	74.388	126.709	1.00	19.75
25		ATOM 2898	CZ	ARG B 210	35.586	74.897	127.907	1.00	39.59

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		ATOM	2899	NH1	ARG	B	210	35.109	74.344	129.018	1.00	52.65
		ATOM	2900	NH2	ARG	B	210	36.434	75.920	128.006	1.00	44.79
		ATOM	2901	N	PRO	B	211	33.254	67.904	128.586	1.00	4.61
		ATOM	2902	CA	PRO	B	211	32.145	66.983	128.820	1.00	2.00
5		ATOM	2903	C	PRO	B	211	30.871	67.788	128.582	1.00	9.80
		ATOM	2904	O	PRO	B	211	30.924	68.946	128.217	1.00	29.22
		ATOM	2905	CB	PRO	B	211	32.296	66.628	130.296	1.00	2.00
		ATOM	2906	CG	PRO	B	211	33.715	66.840	130.567	1.00	2.00
		ATOM	2907	CD	PRO	B	211	34.013	68.110	129.823	1.00	10.54
10		ATOM	2908	N	THR	B	212	29.724	67.188	128.814	1.00	16.50
		ATOM	2909	CA	THR	B	212	28.475	67.878	128.604	1.00	11.73
		ATOM	2910	C	THR	B	212	28.127	68.830	129.742	1.00	23.70
		ATOM	2911	O	THR	B	212	28.545	68.626	130.893	1.00	31.82
		ATOM	2912	CB	THR	B	212	27.360	66.856	128.377	1.00	20.20
15		ATOM	2913	OG1	THR	B	212	27.555	66.234	127.104	1.00	30.23
		ATOM	2914	CG2	THR	B	212	25.989	67.513	128.392	1.00	55.60
		ATOM	2915	N	MET	B	213	27.344	69.853	129.385	1.00	31.68
		ATOM	2916	CA	MET	B	213	26.849	70.916	130.260	1.00	38.72
		ATOM	2917	C	MET	B	213	27.838	72.089	130.297	1.00	48.57
20		ATOM	2918	O	MET	B	213	28.474	72.299	131.351	1.00	49.23
		ATOM	2919	CB	MET	B	213	26.517	70.409	131.673	1.00	47.27
		ATOM	2920	CG	MET	B	213	25.462	71.256	132.367	1.00	71.67
		ATOM	2921	SD	MET	B	213	25.711	71.406	134.140	1.00	109.36
		ATOM	2922	CE	MET	B	213	27.040	72.706	134.232	1.00	87.15
25		ATOM	2923	OXT	MET	B	213	27.976	72.778	129.251	1.00	50.90

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	ATOM 2924 N	ALA C	7	37.324	44.617	129.685	1.00	70.70
	ATOM 2925 CA	ALA C	7	37.825	45.940	130.145	1.00	64.63
	ATOM 2926 C	ALA C	7	37.474	46.116	131.621	1.00	62.57
	ATOM 2927 O	ALA C	7	36.345	45.855	132.038	1.00	66.61
5	ATOM 2928 CB	ALA C	7	37.209	47.053	129.307	1.00	58.22
	ATOM 2929 N	SER C	8	38.443	46.557	132.410	1.00	48.87
	ATOM 2930 CA	SER C	8	38.222	46.734	133.831	1.00	40.21
	ATOM 2931 C	SER C	8	38.971	47.952	134.367	1.00	36.75
	ATOM 2932 O	SER C	8	39.730	48.605	133.647	1.00	23.31
10	ATOM 2933 CB	SER C	8	38.630	45.458	134.607	1.00	48.82
	ATOM 2934 OG	SER C	8	37.717	44.369	134.417	1.00	55.86
	ATOM 2935 N	SER C	9	38.689	48.279	135.622	1.00	30.24
	ATOM 2936 CA	SER C	9	39.305	49.390	136.323	1.00	18.52
	ATOM 2937 C	SER C	9	40.576	48.904	136.978	1.00	17.41
15	ATOM 2938 O	SER C	9	41.377	49.705	137.436	1.00	23.66
	ATOM 2939 CB	SER C	9	38.344	49.912	137.389	1.00	36.91
	ATOM 2940 OG	SER C	9	37.395	48.910	137.757	1.00	45.00
	ATOM 2941 N	LEU C	10	40.765	47.582	136.959	1.00	15.65
	ATOM 2942 CA	LEU C	10	41.912	46.901	137.547	1.00	3.24
20	ATOM 2943 C	LEU C	10	42.696	46.113	136.516	1.00	7.07
	ATOM 2944 O	LEU C	10	42.120	45.485	135.620	1.00	12.19
	ATOM 2945 CB	LEU C	10	41.418	45.948	138.620	1.00	9.05
	ATOM 2946 CG	LEU C	10	40.816	46.667	139.823	1.00	13.49
	ATOM 2947 CD1	LEU C	10	40.130	45.691	140.731	1.00	16.58
25	ATOM 2948 CD2	LEU C	10	41.904	47.384	140.561	1.00	4.27

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		ATOM 2949	N	PRO	C	11	44.035	46.167	136.602	1.00	4.83
		ATOM 2950	CA	PRO	C	11	44.950	45.466	135.689	1.00	2.00
		ATOM 2951	C	PRO	C	11	45.025	43.995	136.042	1.00	9.11
		ATOM 2952	O	PRO	C	11	45.355	43.641	137.175	1.00	23.16
5		ATOM 2953	CB	PRO	C	11	46.289	46.170	135.935	1.00	2.00
		ATOM 2954	CG	PRO	C	11	46.192	46.626	137.352	1.00	2.00
		ATOM 2955	CD	PRO	C	11	44.769	47.087	137.495	1.00	2.15
		ATOM 2956	N	GLN	C	12	44.757	43.131	135.073	1.00	12.13
		ATOM 2957	CA	GLN	C	12	44.754	41.686	135.309	1.00	3.65
10		ATOM 2958	C	GLN	C	12	45.910	41.161	136.187	1.00	7.75
		ATOM 2959	O	GLN	C	12	45.684	40.396	137.121	1.00	22.07
		ATOM 2960	CB	GLN	C	12	44.693	40.939	133.971	1.00	7.85
		ATOM 2961	CG	GLN	C	12	44.396	39.444	134.078	1.00	34.46
		ATOM 2962	CD	GLN	C	12	42.923	39.107	133.940	1.00	51.37
15		ATOM 2963	OE1	GLN	C	12	42.052	39.960	134.145	1.00	69.95
		ATOM 2964	NE2	GLN	C	12	42.635	37.862	133.564	1.00	55.69
		ATOM 2965	N	SER	C	13	47.130	41.616	135.946	1.00	3.65
		ATOM 2966	CA	SER	C	13	48.261	41.144	136.733	1.00	4.29
		ATOM 2967	C	SER	C	13	48.073	41.345	138.234	1.00	12.18
20		ATOM 2968	O	SER	C	13	48.550	40.565	139.041	1.00	22.84
		ATOM 2969	CB	SER	C	13	49.540	41.822	136.285	1.00	7.77
		ATOM 2970	OG	SER	C	13	49.393	43.226	136.385	1.00	45.31
		ATOM 2971	N	PHE	C	14	47.349	42.376	138.609	1.00	8.39
		ATOM 2972	CA	PHE	C	14	47.124	42.636	139.999	1.00	2.00
25		ATOM 2973	C	PHE	C	14	46.156	41.614	140.540	1.00	2.98

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		ATOM 2974	O	PHE	C	14	46.386	41.013	141.591	1.00	18.56
		ATOM 2975	CB	PHE	C	14	46.574	44.038	140.156	1.00	3.21
		ATOM 2976	CG	PHE	C	14	45.963	44.292	141.482	1.00	13.50
		ATOM 2977	CD1	PHE	C	14	46.741	44.325	142.618	1.00	2.00
5		ATOM 2978	CD2	PHE	C	14	44.594	44.429	141.605	1.00	16.19
		ATOM 2979	CE1	PHE	C	14	46.165	44.479	143.844	1.00	6.08
		ATOM 2980	CE2	PHE	C	14	44.022	44.584	142.833	1.00	17.70
		ATOM 2981	CZ	PHE	C	14	44.805	44.607	143.951	1.00	11.84
		ATOM 2982	N	LEU	C	15	45.071	41.402	139.816	1.00	2.00
10		ATOM 2983	CA	LEU	C	15	44.068	40.444	140.255	1.00	2.72
		ATOM 2984	C	LEU	C	15	44.632	39.041	140.350	1.00	8.50
		ATOM 2985	O	LEU	C	15	44.257	38.266	141.231	1.00	17.18
		ATOM 2986	CB	LEU	C	15	42.904	40.433	139.289	1.00	2.00
		ATOM 2987	CG	LEU	C	15	41.969	41.618	139.269	1.00	2.00
15		ATOM 2988	CD1	LEU	C	15	40.896	41.296	138.273	1.00	14.51
		ATOM 2989	CD2	LEU	C	15	41.353	41.788	140.630	1.00	2.00
		ATOM 2990	N	LEU	C	16	45.547	38.716	139.442	1.00	8.32
		ATOM 2991	CA	LEU	C	16	46.141	37.394	139.427	1.00	2.00
		ATOM 2992	C	LEU	C	16	47.059	37.200	140.595	1.00	2.00
20		ATOM 2993	O	LEU	C	16	47.111	36.114	141.159	1.00	18.45
		ATOM 2994	CB	LEU	C	16	46.820	37.104	138.101	1.00	2.00
		ATOM 2995	CG	LEU	C	16	45.896	36.932	136.887	1.00	2.00
		ATOM 2996	CD1	LEU	C	16	46.711	36.412	135.790	1.00	2.00
		ATOM 2997	CD2	LEU	C	16	44.786	35.958	137.102	1.00	2.00
25		ATOM 2998	N	LYS	C	17	47.780	38.247	140.971	1.00	2.00

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		ATOM 2999	CA	LYS	C	17	48.638	38.172	142.149	1.00	2.00
		ATOM 3000	C	LYS	C	17	47.774	38.111	143.412	1.00	10.50
		ATOM 3001	O	LYS	C	17	48.142	37.467	144.382	1.00	23.80
		ATOM 3002	CB	LYS	C	17	49.546	39.371	142.231	1.00	2.32
5		ATOM 3003	CG	LYS	C	17	50.523	39.459	141.090	1.00	13.58
		ATOM 3004	CD	LYS	C	17	51.515	40.604	141.332	1.00	27.32
		ATOM 3005	CE	LYS	C	17	52.363	40.899	140.093	1.00	52.53
		ATOM 3006	NZ	LYS	C	17	53.197	42.126	140.244	1.00	61.93
		ATOM 3007	N	CYS	C	18	46.634	38.792	143.409	1.00	3.75
10		ATOM 3008	CA	CYS	C	18	45.744	38.742	144.549	1.00	2.00
		ATOM 3009	C	CYS	C	18	45.293	37.306	144.802	1.00	2.00
		ATOM 3010	O	CYS	C	18	45.387	36.805	145.914	1.00	12.40
		ATOM 3011	CB	CYS	C	18	44.563	39.638	144.290	1.00	2.00
		ATOM 3012	SG	CYS	C	18	44.980	41.342	144.562	1.00	6.90
15		ATOM 3013	N	LEU	C	19	44.888	36.620	143.741	1.00	2.00
		ATOM 3014	CA	LEU	C	19	44.425	35.233	143.820	1.00	2.92
		ATOM 3015	C	LEU	C	19	45.473	34.268	144.304	1.00	8.24
		ATOM 3016	O	LEU	C	19	45.178	33.253	144.913	1.00	17.05
		ATOM 3017	CB	LEU	C	19	43.954	34.764	142.463	1.00	9.51
20		ATOM 3018	CG	LEU	C	19	42.692	35.422	141.907	1.00	12.13
		ATOM 3019	CD1	LEU	C	19	42.497	34.971	140.479	1.00	3.84
		ATOM 3020	CD2	LEU	C	19	41.493	35.051	142.755	1.00	18.70
		ATOM 3021	N	GLU	C	20	46.712	34.579	144.007	1.00	12.19
		ATOM 3022	CA	GLU	C	20	47.787	33.729	144.426	1.00	2.00
25		ATOM 3023	C	GLU	C	20	48.073	33.977	145.910	1.00	6.85

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		ATOM 3024	O	GLU	C	20	48.379	33.049	146.639	1.00	12.34
		ATOM 3025	CB	GLU	C	20	49.000	34.011	143.557	1.00	2.00
		ATOM 3026	CG	GLU	C	20	50.074	33.020	143.746	1.00	3.81
		ATOM 3027	CD	GLU	C	20	51.197	33.236	142.824	1.00	11.23
5		ATOM 3028	OE1	GLU	C	20	52.131	33.892	143.213	1.00	4.66
		ATOM 3029	OE2	GLU	C	20	51.189	32.746	141.706	1.00	18.65
		ATOM 3030	N	GLN	C	21	47.954	35.221	146.368	1.00	6.38
		ATOM 3031	CA	GLN	C	21	48.202	35.519	147.765	1.00	2.00
		ATOM 3032	C	GLN	C	21	47.090	34.875	148.595	1.00	2.00
10		ATOM 3033	O	GLN	C	21	47.330	34.306	149.647	1.00	11.32
		ATOM 3034	CB	GLN	C	21	48.283	37.019	147.988	1.00	2.00
		ATOM 3035	CG	GLN	C	21	49.424	37.698	147.258	1.00	2.46
		ATOM 3036	CD	GLN	C	21	49.637	39.155	147.664	1.00	12.76
		ATOM 3037	OE1	GLN	C	21	49.293	40.068	146.924	1.00	7.82
15		ATOM 3038	NE2	GLN	C	21	50.225	39.371	148.827	1.00	8.14
		ATOM 3039	N	VAL	C	22	45.880	34.874	148.085	1.00	2.00
		ATOM 3040	CA	VAL	C	22	44.807	34.248	148.811	1.00	2.00
		ATOM 3041	C	VAL	C	22	45.168	32.794	148.999	1.00	3.52
		ATOM 3042	O	VAL	C	22	45.151	32.300	150.106	1.00	23.32
20		ATOM 3043	CB	VAL	C	22	43.482	34.371	148.050	1.00	2.70
		ATOM 3044	CG1	VAL	C	22	42.505	33.351	148.516	1.00	4.35
		ATOM 3045	CG2	VAL	C	22	42.908	35.731	148.248	1.00	2.00
		ATOM 3046	N	ARG	C	23	45.539	32.108	147.931	1.00	8.50
		ATOM 3047	CA	ARG	C	23	45.904	30.705	148.064	1.00	2.00
25		ATOM 3048	C	ARG	C	23	47.095	30.478	148.997	1.00	2.06

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	ATOM 3049 O	ARG C	23	47.061	29.585	149.817	1.00	8.20
	ATOM 3050 CB	ARG C	23	46.219	30.099	146.705	1.00	10.14
	ATOM 3051 CG	ARG C	23	45.034	29.761	145.816	1.00	3.80
	ATOM 3052 CD	ARG C	23	45.553	29.170	144.484	1.00	18.10
5	ATOM 3053 NE	ARG C	23	44.891	29.761	143.321	1.00	37.39
	ATOM 3054 CZ	ARG C	23	45.481	30.523	142.399	1.00	29.77
	ATOM 3055 NH1	ARG C	23	46.780	30.797	142.464	1.00	15.01
	ATOM 3056 NH2	ARG C	23	44.739	31.080	141.446	1.00	28.45
	ATOM 3057 N	LYS C	24	48.137	31.288	148.873	1.00	2.00
10	ATOM 3058 CA	LYS C	24	49.321	31.143	149.698	1.00	2.00
	ATOM 3059 C	LYS C	24	48.883	31.225	151.130	1.00	5.87
	ATOM 3060 O	LYS C	24	49.240	30.373	151.938	1.00	15.33
	ATOM 3061 CB	LYS C	24	50.321	32.251	149.382	1.00	2.00
	ATOM 3062 CG	LYS C	24	51.710	32.036	149.921	1.00	4.28
15	ATOM 3063 CD	LYS C	24	52.659	33.042	149.305	1.00	5.63
	ATOM 3064 CE	LYS C	24	54.015	33.039	149.983	1.00	25.70
	ATOM 3065 NZ	LYS C	24	54.741	31.768	149.806	1.00	33.89
	ATOM 3066 N	ILE C	25	48.024	32.197	151.418	1.00	5.48
	ATOM 3067 CA	ILE C	25	47.517	32.404	152.766	1.00	5.48
20	ATOM 3068 C	ILE C	25	46.582	31.304	153.235	1.00	4.26
	ATOM 3069 O	ILE C	25	46.530	30.990	154.412	1.00	17.19
	ATOM 3070 CB	ILE C	25	46.810	33.730	152.898	1.00	2.00
	ATOM 3071 CG1	ILE C	25	47.806	34.861	152.717	1.00	8.94
	ATOM 3072 CG2	ILE C	25	46.241	33.869	154.267	1.00	2.00
25	ATOM 3073 CD1	ILE C	25	47.144	36.219	152.561	1.00	5.43

		ATOM 3074	N	GLN	C	26	45.813	30.734	152.335	1.00	5.13
		ATOM 3075	CA	GLN	C	26	44.934	29.647	152.728	1.00	7.24
		ATOM 3076	C	GLN	C	26	45.773	28.417	153.051	1.00	7.27
		ATOM 3077	O	GLN	C	26	45.329	27.525	153.745	1.00	26.82
5		ATOM 3078	CB	GLN	C	26	44.002	29.277	151.595	1.00	3.21
		ATOM 3079	CG	GLN	C	26	43.002	30.302	151.248	1.00	9.07
		ATOM 3080	CD	GLN	C	26	42.260	29.914	150.012	1.00	13.81
		ATOM 3081	OE1	GLN	C	26	41.056	29.716	150.039	1.00	24.75
		ATOM 3082	NE2	GLN	C	26	42.983	29.765	148.915	1.00	34.84
10		ATOM 3083	N	GLY	C	27	46.961	28.329	152.480	1.00	13.10
		ATOM 3084	CA	GLY	C	27	47.799	27.181	152.749	1.00	9.99
		ATOM 3085	C	GLY	C	27	48.525	27.405	154.054	1.00	12.84
		ATOM 3086	O	GLY	C	27	48.873	26.441	154.733	1.00	24.01
		ATOM 3087	N	ASP	C	28	48.788	28.668	154.384	1.00	8.18
15		ATOM 3088	CA	ASP	C	28	49.471	29.014	155.624	1.00	15.20
		ATOM 3089	C	ASP	C	28	48.544	28.749	156.818	1.00	17.49
		ATOM 3090	O	ASP	C	28	48.965	28.235	157.852	1.00	24.57
		ATOM 3091	CB	ASP	C	28	49.903	30.483	155.612	1.00	17.26
		ATOM 3092	CG	ASP	C	28	51.041	30.769	154.639	1.00	25.61
20		ATOM 3093	OD1	ASP	C	28	51.796	29.849	154.239	1.00	40.33
		ATOM 3094	OD2	ASP	C	28	51.177	31.947	154.280	1.00	19.48
		ATOM 3095	N	GLY	C	29	47.272	29.081	156.656	1.00	17.64
		ATOM 3096	CA	GLY	C	29	46.297	28.856	157.709	1.00	2.90
		ATOM 3097	C	GLY	C	29	46.081	27.379	157.932	1.00	2.80
25		ATOM 3098	O	GLY	C	29	45.891	26.959	159.053	1.00	14.25

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	ATOM 3099 N	ALA C	30	46.129	26.579	156.877	1.00	4.17
	ATOM 3100 CA	ALA C	30	45.952	25.139	157.017	1.00	2.00
	ATOM 3101 C	ALA C	30	47.109	24.585	157.787	1.00	7.28
	ATOM 3102 O	ALA C	30	46.932	23.724	158.636	1.00	29.84
5	ATOM 3103 CB	ALA C	30	45.901	24.491	155.707	1.00	2.48
	ATOM 3104 N	ALA C	31	48.305	25.062	157.470	1.00	9.43
	ATOM 3105 CA	ALA C	31	49.496	24.626	158.162	1.00	4.25
	ATOM 3106 C	ALA C	31	49.284	24.904	159.645	1.00	9.67
	ATOM 3107 O	ALA C	31	49.490	24.023	160.480	1.00	24.36
10	ATOM 3108 CB	ALA C	31	50.680	25.387	157.644	1.00	4.77
	ATOM 3109 N	LEU C	32	48.797	26.108	159.950	1.00	11.94
	ATOM 3110 CA	LEU C	32	48.519	26.545	161.327	1.00	10.26
	ATOM 3111 C	LEU C	32	47.506	25.619	161.997	1.00	10.70
	ATOM 3112 O	LEU C	32	47.744	25.048	163.039	1.00	21.66
15	ATOM 3113 CB	LEU C	32	47.972	27.972	161.328	1.00	2.00
	ATOM 3114 CG	LEU C	32	47.650	28.563	162.700	1.00	8.73
	ATOM 3115 CD1	LEU C	32	48.875	28.438	163.540	1.00	16.54
	ATOM 3116 CD2	LEU C	32	47.203	30.019	162.660	1.00	2.00
	ATOM 3117 N	GLN C	33	46.372	25.448	161.373	1.00	6.77
20	ATOM 3118 CA	GLN C	33	45.385	24.575	161.931	1.00	11.34
	ATOM 3119 C	GLN C	33	45.892	23.140	162.058	1.00	16.79
	ATOM 3120 O	GLN C	33	45.460	22.410	162.940	1.00	33.97
	ATOM 3121 CB	GLN C	33	44.125	24.618	161.084	1.00	10.05
	ATOM 3122 CG	GLN C	33	43.298	25.861	161.302	1.00	26.13
25	ATOM 3123 CD	GLN C	33	42.197	26.004	160.267	1.00	55.04

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	ATOM 3124	OE1	GLN	C	33	41.031	26.215	160.606	1.00	62.61
	ATOM 3125	NE2	GLN	C	33	42.564	25.894	158.993	1.00	56.94
	ATOM 3126	N	GLU	C	34	46.797	22.716	161.195	1.00	11.03
	ATOM 3127	CA	GLU	C	34	47.280	21.357	161.312	1.00	17.39
5	ATOM 3128	C	GLU	C	34	48.134	21.321	162.572	1.00	14.89
	ATOM 3129	O	GLU	C	34	47.926	20.495	163.448	1.00	18.68
	ATOM 3130	CB	GLU	C	34	48.095	20.947	160.083	1.00	39.26
	ATOM 3131	CG	GLU	C	34	48.170	19.425	159.830	1.00	78.84
	ATOM 3132	CD	GLU	C	34	48.800	18.614	160.968	1.00	96.03
10	ATOM 3133	OE1	GLU	C	34	49.989	18.836	161.289	1.00	105.15
	ATOM 3134	OE2	GLU	C	34	48.103	17.735	161.524	1.00	97.73
	ATOM 3135	N	LYS	C	35	49.044	22.275	162.696	1.00	9.61
	ATOM 3136	CA	LYS	C	35	49.928	22.345	163.850	1.00	9.34
	ATOM 3137	C	LYS	C	35	49.135	22.337	165.180	1.00	18.47
15	ATOM 3138	O	LYS	C	35	49.422	21.553	166.074	1.00	29.95
	ATOM 3139	CB	LYS	C	35	50.797	23.593	163.731	1.00	3.80
	ATOM 3140	CG	LYS	C	35	52.077	23.585	164.541	1.00	11.64
	ATOM 3141	CD	LYS	C	35	53.104	22.629	164.006	1.00	16.33
	ATOM 3142	CE	LYS	C	35	54.370	22.700	164.842	1.00	34.92
20	ATOM 3143	NZ	LYS	C	35	55.348	21.640	164.459	1.00	66.70
	ATOM 3144	N	LEU	C	36	48.099	23.157	165.286	1.00	18.42
	ATOM 3145	CA	LEU	C	36	47.286	23.222	166.501	1.00	8.34
	ATOM 3146	C	LEU	C	36	46.581	21.928	166.769	1.00	12.47
	ATOM 3147	O	LEU	C	36	46.311	21.588	167.902	1.00	19.27
25	ATOM 3148	CB	LEU	C	36	46.236	24.302	166.390	1.00	2.00

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		ATOM	3149	CG	LEU	C	36	46.815	25.692	166.320	1.00	2.00
		ATOM	3150	CD1	LEU	C	36	45.839	26.581	165.671	1.00	7.33
		ATOM	3151	CD2	LEU	C	36	47.143	26.178	167.659	1.00	2.00
		ATOM	3152	N	CYS	C	37	46.228	21.219	165.721	1.00	13.93
5		ATOM	3153	CA	CYS	C	37	45.553	19.963	165.918	1.00	21.15
		ATOM	3154	C	CYS	C	37	46.557	18.892	166.308	1.00	19.26
		ATOM	3155	O	CYS	C	37	46.301	18.080	167.177	1.00	35.39
		ATOM	3156	CB	CYS	C	37	44.803	19.583	164.661	1.00	24.55
		ATOM	3157	SG	CYS	C	37	44.146	17.906	164.693	1.00	63.71
10		ATOM	3158	N	ALA	C	38	47.747	18.961	165.744	1.00	20.60
		ATOM	3159	CA	ALA	C	38	48.791	17.980	166.032	1.00	22.05
		ATOM	3160	C	ALA	C	38	49.385	18.135	167.421	1.00	19.77
		ATOM	3161	O	ALA	C	38	49.558	17.171	168.170	1.00	37.05
		ATOM	3162	CB	ALA	C	38	49.897	18.111	165.000	1.00	19.42
15		ATOM	3163	N	THR	C	39	49.725	19.375	167.719	1.00	11.31
		ATOM	3164	CA	THR	C	39	50.342	19.797	168.956	1.00	9.99
		ATOM	3165	C	THR	C	39	49.442	19.869	170.217	1.00	16.63
		ATOM	3166	O	THR	C	39	49.925	19.648	171.324	1.00	17.72
		ATOM	3167	CB	THR	C	39	51.023	21.162	168.686	1.00	2.10
20		ATOM	3168	OG1	THR	C	39	51.901	21.022	167.567	1.00	26.10
		ATOM	3169	CG2	THR	C	39	51.821	21.650	169.862	1.00	11.26
		ATOM	3170	N	TYR	C	40	48.146	20.137	170.056	1.00	12.60
		ATOM	3171	CA	TYR	C	40	47.250	20.268	171.203	1.00	2.00
		ATOM	3172	C	TYR	C	40	45.898	19.638	170.993	1.00	11.97
25		ATOM	3173	O	TYR	C	40	44.918	20.105	171.559	1.00	18.92

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		ATOM	3174	CB	TYR	C	40	46.990	21.735	171.488	1.00	2.00
		ATOM	3175	CG	TYR	C	40	48.216	22.612	171.594	1.00	10.90
		ATOM	3176	CD1	TYR	C	40	49.284	22.258	172.400	1.00	14.18
		ATOM	3177	CD2	TYR	C	40	48.289	23.827	170.903	1.00	13.60
5		ATOM	3178	CE1	TYR	C	40	50.409	23.099	172.524	1.00	36.04
		ATOM	3179	CE2	TYR	C	40	49.405	24.678	171.012	1.00	3.06
		ATOM	3180	CZ	TYR	C	40	50.460	24.315	171.824	1.00	28.91
		ATOM	3181	OH	TYR	C	40	51.539	25.177	171.948	1.00	7.57
		ATOM	3182	N	LYS	C	41	45.829	18.607	170.165	1.00	12.42
10		ATOM	3183	CA	LYS	C	41	44.571	17.923	169.863	1.00	14.12
		ATOM	3184	C	LYS	C	41	43.298	18.805	169.761	1.00	25.06
		ATOM	3185	O	LYS	C	41	42.166	18.340	170.020	1.00	36.02
		ATOM	3186	CB	LYS	C	41	44.375	16.716	170.784	1.00	9.87
		ATOM	3187	CG	LYS	C	41	45.368	15.580	170.528	1.00	28.99
15		ATOM	3188	CD	LYS	C	41	44.654	14.217	170.325	1.00	55.65
		ATOM	3189	CE	LYS	C	41	43.704	14.203	169.104	1.00	64.89
		ATOM	3190	NZ	LYS	C	41	42.949	12.917	168.955	1.00	69.81
		ATOM	3191	N	LEU	C	42	43.508	20.067	169.364	1.00	24.75
		ATOM	3192	CA	LEU	C	42	42.456	21.065	169.132	1.00	25.10
20		ATOM	3193	C	LEU	C	42	42.193	20.992	167.611	1.00	31.92
		ATOM	3194	O	LEU	C	42	42.755	21.759	166.834	1.00	33.45
		ATOM	3195	CB	LEU	C	42	42.980	22.448	169.508	1.00	11.25
		ATOM	3196	CG	LEU	C	42	42.889	22.866	170.971	1.00	11.05
		ATOM	3197	CD1	LEU	C	42	43.707	24.094	171.222	1.00	16.50
25		ATOM	3198	CD2	LEU	C	42	41.451	23.154	171.289	1.00	27.22

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		ATOM 3199	N	CYS	C	43	41.307	20.089	167.203	1.00	37.36
		ATOM 3200	CA	CYS	C	43	41.049	19.848	165.790	1.00	38.53
		ATOM 3201	C	CYS	C	43	39.769	20.289	165.102	1.00	42.92
		ATOM 3202	O	CYS	C	43	39.720	20.371	163.875	1.00	59.27
5		ATOM 3203	CB	CYS	C	43	41.250	18.363	165.556	1.00	38.45
		ATOM 3204	SG	CYS	C	43	42.842	17.841	166.276	1.00	61.61
		ATOM 3205	N	HIS	C	44	38.726	20.564	165.862	1.00	40.68
		ATOM 3206	CA	HIS	C	44	37.482	20.938	165.237	1.00	39.49
		ATOM 3207	C	HIS	C	44	37.010	22.284	165.743	1.00	42.35
10		ATOM 3208	O	HIS	C	44	36.445	22.385	166.827	1.00	48.68
		ATOM 3209	CB	HIS	C	44	36.436	19.858	165.504	1.00	43.21
		ATOM 3210	CG	HIS	C	44	36.975	18.465	165.424	1.00	59.44
		ATOM 3211	ND1	HIS	C	44	37.971	18.003	166.259	1.00	66.67
		ATOM 3212	CD2	HIS	C	44	36.652	17.427	164.617	1.00	72.59
15		ATOM 3213	CE1	HIS	C	44	38.237	16.741	165.971	1.00	73.66
		ATOM 3214	NE2	HIS	C	44	37.450	16.367	164.978	1.00	76.84
		ATOM 3215	N	PRO	C	45	37.208	23.337	164.947	1.00	39.21
		ATOM 3216	CA	PRO	C	45	36.794	24.689	165.326	1.00	38.34
		ATOM 3217	C	PRO	C	45	35.325	24.775	165.767	1.00	40.88
20		ATOM 3218	O	PRO	C	45	34.958	25.617	166.587	1.00	50.61
		ATOM 3219	CB	PRO	C	45	37.066	25.492	164.049	1.00	35.22
		ATOM 3220	CG	PRO	C	45	37.011	24.442	162.952	1.00	31.33
		ATOM 3221	CD	PRO	C	45	37.756	23.319	163.582	1.00	35.45
		ATOM 3222	N	GLU	C	46	34.498	23.880	165.243	1.00	44.44
25		ATOM 3223	CA	GLU	C	46	33.078	23.849	165.572	1.00	49.26

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		ATOM	3224	C	GLU	C	46	32.896	23.735	167.083	1.00	49.24
		ATOM	3225	O	GLU	C	46	32.026	24.386	167.666	1.00	53.75
		ATOM	3226	CB	GLU	C	46	32.411	22.666	164.871	1.00	58.05
		ATOM	3227	CG	GLU	C	46	32.409	22.744	163.340	1.00	90.91
5		ATOM	3228	CD	GLU	C	46	33.801	22.660	162.709	1.00	103.82
		ATOM	3229	OE1	GLU	C	46	34.586	21.762	163.087	1.00	105.07
		ATOM	3230	OE2	GLU	C	46	34.106	23.494	161.826	1.00	114.60
		ATOM	3231	N	GLU	C	47	33.773	22.956	167.714	1.00	40.34
		ATOM	3232	CA	GLU	C	47	33.742	22.734	169.160	1.00	33.38
10		ATOM	3233	C	GLU	C	47	34.040	23.976	169.975	1.00	29.29
		ATOM	3234	O	GLU	C	47	33.600	24.106	171.107	1.00	42.08
		ATOM	3235	CB	GLU	C	47	34.713	21.621	169.553	1.00	36.77
		ATOM	3236	CG	GLU	C	47	34.420	20.293	168.838	1.00	50.79
		ATOM	3237	CD	GLU	C	47	35.267	19.116	169.331	1.00	58.14
15		ATOM	3238	OE1	GLU	C	47	36.423	19.327	169.798	1.00	40.88
		ATOM	3239	OE2	GLU	C	47	34.761	17.968	169.225	1.00	55.51
		ATOM	3240	N	LEU	C	48	34.737	24.921	169.373	1.00	30.00
		ATOM	3241	CA	LEU	C	48	35.085	26.155	170.056	1.00	24.32
		ATOM	3242	C	LEU	C	48	34.196	27.316	169.673	1.00	27.05
20		ATOM	3243	O	LEU	C	48	34.332	28.392	170.238	1.00	23.67
		ATOM	3244	CB	LEU	C	48	36.538	26.501	169.755	1.00	28.38
		ATOM	3245	CG	LEU	C	48	37.496	25.365	170.115	1.00	19.73
		ATOM	3246	CD1	LEU	C	48	38.919	25.713	169.799	1.00	15.16
		ATOM	3247	CD2	LEU	C	48	37.355	25.126	171.585	1.00	42.45
25		ATOM	3248	N	VAL	C	49	33.275	27.086	168.737	1.00	38.83

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		ATOM 3249	CA	VAL	C	49	32.358	28.116	168.245	1.00	41.95
		ATOM 3250	C	VAL	C	49	31.944	29.125	169.308	1.00	42.98
		ATOM 3251	O	VAL	C	49	32.177	30.322	169.150	1.00	46.86
		ATOM 3252	CB	VAL	C	49	31.103	27.474	167.569	1.00	48.71
5		ATOM 3253	CG1	VAL	C	49	29.944	28.466	167.483	1.00	58.06
		ATOM 3254	CG2	VAL	C	49	31.457	27.007	166.164	1.00	59.16
		ATOM 3255	N	LEU	C	50	31.452	28.622	170.435	1.00	47.61
		ATOM 3256	CA	LEU	C	50	30.974	29.459	171.526	1.00	51.26
		ATOM 3257	C	LEU	C	50	31.941	30.479	172.123	1.00	54.11
10		ATOM 3258	O	LEU	C	50	31.521	31.534	172.630	1.00	69.00
		ATOM 3259	CB	LEU	C	50	30.387	28.570	172.613	1.00	51.18
		ATOM 3260	CG	LEU	C	50	29.080	27.901	172.179	1.00	39.82
		ATOM 3261	CD1	LEU	C	50	28.471	27.193	173.359	1.00	53.21
		ATOM 3262	CD2	LEU	C	50	28.118	28.965	171.658	1.00	42.42
15		ATOM 3263	N	LEU	C	51	33.232	30.196	172.028	1.00	49.22
		ATOM 3264	CA	LEU	C	51	34.251	31.103	172.565	1.00	47.75
		ATOM 3265	C	LEU	C	51	34.490	32.382	171.736	1.00	49.55
		ATOM 3266	O	LEU	C	51	35.097	33.334	172.227	1.00	47.28
		ATOM 3267	CB	LEU	C	51	35.558	30.339	172.816	1.00	33.19
20		ATOM 3268	CG	LEU	C	51	35.622	29.433	174.058	1.00	33.26
		ATOM 3269	CD1	LEU	C	51	34.276	28.798	174.366	1.00	32.93
		ATOM 3270	CD2	LEU	C	51	36.669	28.360	173.874	1.00	11.40
		ATOM 3271	N	GLY	C	52	33.960	32.426	170.511	1.00	59.08
		ATOM 3272	CA	GLY	C	52	34.108	33.609	169.668	1.00	66.72
25		ATOM 3273	C	GLY	C	52	33.490	34.788	170.393	1.00	69.40

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		ATOM 3274	O	GLY	C	52	33.823	35.958	170.166	1.00	76.16
		ATOM 3275	N	HIS	C	53	32.615	34.425	171.328	1.00	65.27
		ATOM 3276	CA	HIS	C	53	31.898	35.350	172.196	1.00	69.91
		ATOM 3277	C	HIS	C	53	32.808	35.747	173.365	1.00	71.49
5		ATOM 3278	O	HIS	C	53	33.210	36.924	173.471	1.00	70.30
		ATOM 3279	CB	HIS	C	53	30.589	34.678	172.735	1.00	76.64
		ATOM 3280	N	SER	C	54	33.166	34.768	174.200	1.00	74.65
		ATOM 3281	CA	SER	C	54	34.011	35.009	175.368	1.00	79.82
		ATOM 3282	C	SER	C	54	35.285	35.800	175.086	1.00	78.87
10		ATOM 3283	O	SER	C	54	35.663	36.695	175.847	1.00	82.22
		ATOM 3284	CB	SER	C	54	34.379	33.680	176.032	1.00	77.82
		ATOM 3285	OG	SER	C	54	33.221	33.002	176.483	1.00	88.02
		ATOM 3286	N	LEU	C	55	35.940	35.469	173.985	1.00	74.56
		ATOM 3287	CA	LEU	C	55	37.183	36.122	173.623	1.00	76.03
15		ATOM 3288	C	LEU	C	55	37.010	37.362	172.772	1.00	79.74
		ATOM 3289	O	LEU	C	55	37.965	38.111	172.565	1.00	88.43
		ATOM 3290	CB	LEU	C	55	38.094	35.129	172.913	1.00	68.42
		ATOM 3291	CG	LEU	C	55	38.387	33.891	173.759	1.00	62.03
		ATOM 3292	CD1	LEU	C	55	39.216	32.899	172.971	1.00	48.99
20		ATOM 3293	CD2	LEU	C	55	39.084	34.301	175.045	1.00	64.50
		ATOM 3294	N	GLY	C	56	35.802	37.575	172.268	1.00	77.20
		ATOM 3295	CA	GLY	C	56	35.558	38.742	171.443	1.00	78.25
		ATOM 3296	C	GLY	C	56	36.296	38.717	170.115	1.00	73.80
		ATOM 3297	O	GLY	C	56	37.069	39.629	169.791	1.00	69.53
25		ATOM 3298	N	ILE	C	57	36.071	37.655	169.352	1.00	71.30

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	ATOM	3299	CA	ILE	C	57	36.688	37.523	168.047	1.00	59.37
	ATOM	3300	C	ILE	C	57	35.623	37.763	167.004	1.00	60.63
	ATOM	3301	O	ILE	C	57	34.631	37.019	166.896	1.00	58.31
	ATOM	3302	CB	ILE	C	57	37.344	36.178	167.859	1.00	58.16
5	ATOM	3303	CG1	ILE	C	57	38.505	36.075	168.844	1.00	64.61
	ATOM	3304	CG2	ILE	C	57	37.829	36.030	166.424	1.00	58.25
	ATOM	3305	CD1	ILE	C	57	39.225	34.770	168.803	1.00	77.64
	ATOM	3306	N	PRO	C	58	35.786	38.865	166.266	1.00	58.62
	ATOM	3307	CA	PRO	C	58	34.886	39.299	165.214	1.00	55.43
10	ATOM	3308	C	PRO	C	58	35.057	38.538	163.930	1.00	59.05
	ATOM	3309	O	PRO	C	58	36.040	37.821	163.719	1.00	65.39
	ATOM	3310	CB	PRO	C	58	35.290	40.751	165.024	1.00	54.56
	ATOM	3311	CG	PRO	C	58	36.760	40.689	165.214	1.00	51.89
	ATOM	3312	CD	PRO	C	58	36.877	39.841	166.447	1.00	55.84
15	ATOM	3313	N	TRP	C	59	34.044	38.683	163.095	1.00	62.37
	ATOM	3314	CA	TRP	C	59	33.994	38.091	161.762	1.00	66.68
	ATOM	3315	C	TRP	C	59	34.248	39.320	160.845	1.00	75.14
	ATOM	3316	O	TRP	C	59	33.640	40.410	161.043	1.00	70.55
	ATOM	3317	CB	TRP	C	59	32.583	37.466	161.482	1.00	61.41
20	ATOM	3318	N	ALA	C	60	35.218	39.199	159.935	1.00	83.54
	ATOM	3319	CA	ALA	C	60	35.511	40.301	159.029	1.00	78.79
	ATOM	3320	C	ALA	C	60	34.353	40.324	158.067	1.00	79.96
	ATOM	3321	O	ALA	C	60	33.934	39.278	157.558	1.00	73.42
	ATOM	3322	CB	ALA	C	60	36.794	40.075	158.291	1.00	76.17
25	ATOM	3323	N	PRO	C	61	33.754	41.503	157.888	1.00	84.43

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	ATOM 3324	CA	PRO	C	61	32.616	41.676	156.986	1.00	88.94
	ATOM 3325	C	PRO	C	61	33.013	41.868	155.520	1.00	96.30
	ATOM 3326	O	PRO	C	61	34.028	42.503	155.211	1.00	102.77
	ATOM 3327	CB	PRO	C	61	31.944	42.923	157.546	1.00	88.01
5	ATOM 3328	CG	PRO	C	61	33.135	43.759	157.985	1.00	93.61
	ATOM 3329	CD	PRO	C	61	34.029	42.734	158.656	1.00	88.62
	ATOM 3330	N	LEU	C	62	32.225	41.278	154.627	1.00	101.52
	ATOM 3331	CA	LEU	C	62	32.430	41.406	153.186	1.00	106.90
	ATOM 3332	C	LEU	C	62	31.015	41.579	152.629	1.00	115.69
10	ATOM 3333	O	LEU	C	62	30.383	40.620	152.169	1.00	117.56
	ATOM 3334	CB	LEU	C	62	33.135	40.170	152.604	1.00	94.78
	ATOM 3335	CG	LEU	C	62	33.645	40.209	151.153	1.00	85.23
	ATOM 3336	CD1	LEU	C	62	34.462	41.461	150.845	1.00	80.01
	ATOM 3337	CD2	LEU	C	62	34.498	38.987	150.917	1.00	83.96
15	ATOM 3338	N	SER	C	63	30.517	42.810	152.776	1.00	125.17
	ATOM 3339	CA	SER	C	63	29.177	43.243	152.365	1.00	135.37
	ATOM 3340	C	SER	C	63	28.910	43.053	150.871	1.00	141.89
	ATOM 3341	O	SER	C	63	28.775	44.040	150.138	1.00	145.00
	ATOM 3342	CB	SER	C	63	28.986	44.726	152.756	1.00	135.43
20	ATOM 3343	OG	SER	C	63	27.662	45.206	152.545	1.00	133.72
	ATOM 3344	N	SER	C	64	28.772	41.791	150.450	1.00	147.29
	ATOM 3345	CA	SER	C	64	28.525	41.427	149.051	1.00	146.28
	ATOM 3346	C	SER	C	64	29.231	42.430	148.143	1.00	139.52
	ATOM 3347	O	SER	C	64	28.591	43.360	147.641	1.00	142.20
25	ATOM 3348	CB	SER	C	64	27.011	41.420	148.738	1.00	150.84

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	ATOM	3349	OG	SER	C	64	26.289	40.471	149.512	1.00	151.61
	ATOM	3350	N	CYS	C	65	30.525	42.252	147.890	1.00	127.23
	ATOM	3351	CA	CYS	C	65	31.177	43.236	147.045	1.00	121.51
	ATOM	3352	C	CYS	C	65	31.356	43.006	145.540	1.00	121.72
5	ATOM	3353	O	CYS	C	65	32.407	43.328	144.981	1.00	125.05
	ATOM	3354	CB	CYS	C	65	32.447	43.816	147.703	1.00	117.14
	ATOM	3355	SG	CYS	C	65	34.006	42.862	147.747	1.00	108.73
	ATOM	3356	N	PRO	C	66	30.334	42.450	144.855	1.00	117.30
	ATOM	3357	CA	PRO	C	66	30.511	42.256	143.412	1.00	118.09
10	ATOM	3358	C	PRO	C	66	30.716	43.610	142.690	1.00	118.48
	ATOM	3359	O	PRO	C	66	31.556	43.726	141.791	1.00	121.39
	ATOM	3360	CB	PRO	C	66	29.202	41.578	143.019	1.00	117.63
	ATOM	3361	CG	PRO	C	66	28.919	40.722	144.223	1.00	108.01
	ATOM	3362	CD	PRO	C	66	29.142	41.712	145.316	1.00	111.44
15	ATOM	3363	N	SER	C	67	29.922	44.605	143.079	1.00	113.88
	ATOM	3364	CA	SER	C	67	29.996	45.968	142.547	1.00	111.51
	ATOM	3365	C	SER	C	67	28.949	46.742	143.337	1.00	114.55
	ATOM	3366	O	SER	C	67	27.759	46.390	143.344	1.00	107.21
	ATOM	3367	CB	SER	C	67	29.715	46.038	141.038	1.00	102.32
20	ATOM	3368	OG	SER	C	67	30.233	47.242	140.478	1.00	91.98
	ATOM	3369	N	GLN	C	68	29.433	47.748	144.061	1.00	114.28
	ATOM	3370	CA	GLN	C	68	28.609	48.602	144.934	1.00	121.21
	ATOM	3371	C	GLN	C	68	28.503	50.098	144.445	1.00	123.31
	ATOM	3372	O	GLN	C	68	28.660	50.412	143.218	1.00	127.24
25	ATOM	3373	CB	GLN	C	68	29.198	48.524	146.397	1.00	130.15

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	ATOM 3374 N	ALA C	69	28.265	51.009	145.395	1.00	134.80
	ATOM 3375 CA	ALA C	69	28.179	52.444	145.099	1.00	131.73
	ATOM 3376 C	ALA C	69	29.493	52.835	144.428	1.00	130.30
	ATOM 3377 O	ALA C	69	29.636	53.935	143.876	1.00	125.47
5	ATOM 3378 CB	ALA C	69	27.988	53.243	146.387	1.00	116.41
	ATOM 3379 N	LEU C	70	30.457	51.920	144.523	1.00	118.01
	ATOM 3380 CA	LEU C	70	31.786	52.090	143.922	1.00	121.32
	ATOM 3381 C	LEU C	70	32.070	51.044	142.792	1.00	114.13
	ATOM 3382 O	LEU C	70	31.870	49.809	143.010	1.00	112.44
10	ATOM 3383 CB	LEU C	70	32.905	52.006	145.061	1.00	132.28
	ATOM 3384 N	GLN C	71	32.505	51.541	141.609	1.00	104.85
	ATOM 3385 CA	GLN C	71	32.890	50.677	140.457	1.00	93.23
	ATOM 3386 C	GLN C	71	34.288	50.044	140.798	1.00	89.78
	ATOM 3387 O	GLN C	71	35.288	50.251	140.053	1.00	79.30
15	ATOM 3388 CB	GLN C	71	32.974	51.525	139.124	1.00	82.36
	ATOM 3389 N	LEU C	72	34.327	49.324	141.934	1.00	93.73
	ATOM 3390 CA	LEU C	72	35.495	48.630	142.523	1.00	86.56
	ATOM 3391 C	LEU C	72	36.273	49.324	143.657	1.00	83.04
	ATOM 3392 O	LEU C	72	36.835	48.644	144.527	1.00	70.92
20	ATOM 3393 CB	LEU C	72	36.444	48.081	141.456	1.00	73.91
	ATOM 3394 CG	LEU C	72	35.899	46.755	140.941	1.00	60.89
	ATOM 3395 CD1	LEU C	72	36.658	46.309	139.719	1.00	58.93
	ATOM 3396 CD2	LEU C	72	35.961	45.727	142.063	1.00	55.21
	ATOM 3397 N	ALA C	73	36.252	50.659	143.677	1.00	82.92
25	ATOM 3398 CA	ALA C	73	36.928	51.453	144.709	1.00	80.31

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	ATOM 3399 C	ALA C	73	36.649	50.856	146.083	1.00	80.81
	ATOM 3400 O	ALA C	73	37.560	50.662	146.884	1.00	80.94
	ATOM 3401 CB	ALA C	73	36.434	52.916	144.663	1.00	74.68
	ATOM 3402 N	GLY C	74	35.389	50.470	146.283	1.00	83.86
5	ATOM 3403 CA	GLY C	74	34.929	49.902	147.540	1.00	80.03
	ATOM 3404 C	GLY C	74	35.172	48.430	147.854	1.00	76.22
	ATOM 3405 O	GLY C	74	35.532	48.111	148.991	1.00	80.12
	ATOM 3406 N	CYS C	75	34.931	47.525	146.904	1.00	64.71
	ATOM 3407 CA	CYS C	75	35.149	46.097	147.157	1.00	60.58
10	ATOM 3408 C	CYS C	75	36.578	45.849	147.635	1.00	51.62
	ATOM 3409 O	CYS C	75	36.801	45.135	148.615	1.00	55.28
	ATOM 3410 CB	CYS C	75	34.832	45.260	145.918	1.00	73.04
	ATOM 3411 SG	CYS C	75	35.065	43.452	146.097	1.00	98.22
	ATOM 3412 N	LEU C	76	37.545	46.468	146.969	1.00	40.13
15	ATOM 3413 CA	LEU C	76	38.921	46.326	147.395	1.00	27.58
	ATOM 3414 C	LEU C	76	39.025	46.920	148.787	1.00	26.61
	ATOM 3415 O	LEU C	76	39.675	46.352	149.649	1.00	38.81
	ATOM 3416 CB	LEU C	76	39.876	47.065	146.472	1.00	32.31
	ATOM 3417 CG	LEU C	76	40.122	46.481	145.087	1.00	31.75
20	ATOM 3418 CD1	LEU C	76	41.379	47.119	144.554	1.00	31.66
	ATOM 3419 CD2	LEU C	76	40.318	44.991	145.160	1.00	21.63
	ATOM 3420 N	SER C	77	38.360	48.043	149.017	1.00	21.59
	ATOM 3421 CA	SER C	77	38.395	48.680	150.322	1.00	29.72
	ATOM 3422 C	SER C	77	38.053	47.681	151.438	1.00	30.19
25	ATOM 3423 O	SER C	77	38.748	47.630	152.474	1.00	25.81

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	ATOM	3424	CB	SER	C	77	37.442	49.880	150.348	1.00	40.75
	ATOM	3425	OG	SER	C	77	37.490	50.569	151.589	1.00	72.98
	ATOM	3426	N	GLN	C	78	37.036	46.849	151.199	1.00	29.50
	ATOM	3427	CA	GLN	C	78	36.601	45.851	152.185	1.00	34.83
5	ATOM	3428	C	GLN	C	78	37.575	44.711	152.345	1.00	31.50
	ATOM	3429	O	GLN	C	78	37.879	44.282	153.465	1.00	42.01
	ATOM	3430	CB	GLN	C	78	35.215	45.306	151.861	1.00	37.61
	ATOM	3431	CG	GLN	C	78	34.112	46.321	152.120	1.00	59.70
	ATOM	3432	CD	GLN	C	78	32.816	45.691	152.575	1.00	63.90
10	ATOM	3433	OE1	GLN	C	78	32.044	45.181	151.763	1.00	71.96
	ATOM	3434	NE2	GLN	C	78	32.561	45.734	153.879	1.00	60.80
	ATOM	3435	N	LEU	C	79	38.061	44.217	151.220	1.00	24.84
	ATOM	3436	CA	LEU	C	79	39.034	43.145	151.232	1.00	14.25
	ATOM	3437	C	LEU	C	79	40.186	43.633	152.087	1.00	11.77
15	ATOM	3438	O	LEU	C	79	40.635	42.931	152.976	1.00	16.01
	ATOM	3439	CB	LEU	C	79	39.530	42.873	149.821	1.00	19.92
	ATOM	3440	CG	LEU	C	79	39.399	41.440	149.341	1.00	30.43
	ATOM	3441	CD1	LEU	C	79	39.800	41.403	147.892	1.00	38.96
	ATOM	3442	CD2	LEU	C	79	40.263	40.508	150.186	1.00	24.51
20	ATOM	3443	N	HIS	C	80	40.627	44.866	151.864	1.00	7.48
	ATOM	3444	CA	HIS	C	80	41.719	45.394	152.658	1.00	3.44
	ATOM	3445	C	HIS	C	80	41.380	45.497	154.135	1.00	11.53
	ATOM	3446	O	HIS	C	80	42.224	45.187	154.956	1.00	23.00
	ATOM	3447	CB	HIS	C	80	42.208	46.752	152.154	1.00	2.00
25	ATOM	3448	CG	HIS	C	80	43.211	47.387	153.065	1.00	2.00

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		ATOM	3449	ND1	HIS	C	80	42.851	48.059	154.211	1.00	17.56
		ATOM	3450	CD2	HIS	C	80	44.562	47.359	153.060	1.00	2.28
		ATOM	3451	CE1	HIS	C	80	43.935	48.412	154.876	1.00	18.34
		ATOM	3452	NE2	HIS	C	80	44.988	47.999	154.199	1.00	8.29
5		ATOM	3453	N	SER	C	81	40.194	46.005	154.482	1.00	25.49
		ATOM	3454	CA	SER	C	81	39.796	46.129	155.896	1.00	25.99
		ATOM	3455	C	SER	C	81	39.816	44.793	156.605	1.00	21.22
		ATOM	3456	O	SER	C	81	40.327	44.685	157.713	1.00	31.05
		ATOM	3457	CB	SER	C	81	38.411	46.741	156.027	1.00	18.15
10		ATOM	3458	OG	SER	C	81	38.485	48.127	155.769	1.00	58.54
		ATOM	3459	N	GLY	C	82	39.266	43.780	155.947	1.00	18.57
		ATOM	3460	CA	GLY	C	82	39.250	42.453	156.508	1.00	4.44
		ATOM	3461	C	GLY	C	82	40.661	41.976	156.768	1.00	14.67
		ATOM	3462	O	GLY	C	82	41.017	41.713	157.904	1.00	28.00
15		ATOM	3463	N	LEU	C	83	41.478	41.894	155.726	1.00	19.12
		ATOM	3464	CA	LEU	C	83	42.857	41.430	155.852	1.00	12.75
		ATOM	3465	C	LEU	C	83	43.566	42.197	156.939	1.00	12.32
		ATOM	3466	O	LEU	C	83	44.353	41.649	157.722	1.00	13.95
		ATOM	3467	CB	LEU	C	83	43.604	41.625	154.537	1.00	5.76
20		ATOM	3468	CG	LEU	C	83	43.091	40.732	153.428	1.00	10.55
		ATOM	3469	CD1	LEU	C	83	43.824	41.069	152.178	1.00	13.78
		ATOM	3470	CD2	LEU	C	83	43.277	39.281	153.817	1.00	5.99
		ATOM	3471	N	PHE	C	84	43.235	43.469	157.018	1.00	4.98
		ATOM	3472	CA	PHE	C	84	43.846	44.338	157.999	1.00	19.80
25		ATOM	3473	C	PHE	C	84	43.479	43.916	159.406	1.00	14.63

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	ATOM 3474 O PHE C 84 44.302 43.946 160.319 1.00 29.43
	ATOM 3475 CB PHE C 84 43.420 45.781 157.764 1.00 19.09
	ATOM 3476 CG PHE C 84 44.137 46.749 158.628 1.00 30.48
	ATOM 3477 CD1 PHE C 84 45.529 46.702 158.734 1.00 37.58
5	ATOM 3478 CD2 PHE C 84 43.433 47.687 159.365 1.00 35.43
	ATOM 3479 CE1 PHE C 84 46.207 47.571 159.563 1.00 35.54
	ATOM 3480 CE2 PHE C 84 44.105 48.563 160.198 1.00 35.14
	ATOM 3481 CZ PHE C 84 45.494 48.505 160.298 1.00 30.88
	ATOM 3482 N LEU C 85 42.235 43.513 159.569 1.00 13.28
10	ATOM 3483 CA LEU C 85 41.720 43.067 160.846 1.00 5.37
	ATOM 3484 C LEU C 85 42.373 41.772 161.297 1.00 18.80
	ATOM 3485 O LEU C 85 42.783 41.633 162.451 1.00 24.49
	ATOM 3486 CB LEU C 85 40.249 42.804 160.701 1.00 4.98
	ATOM 3487 CG LEU C 85 39.637 42.372 162.008 1.00 21.88
15	ATOM 3488 CD1 LEU C 85 39.791 43.531 162.987 1.00 20.02
	ATOM 3489 CD2 LEU C 85 38.183 42.000 161.783 1.00 4.67
	ATOM 3490 N TYR C 86 42.408 40.789 160.405 1.00 19.68
	ATOM 3491 CA TYR C 86 43.010 39.522 160.752 1.00 8.11
	ATOM 3492 C TYR C 86 44.486 39.733 160.990 1.00 12.87
20	ATOM 3493 O TYR C 86 45.101 39.010 161.767 1.00 22.86
	ATOM 3494 CB TYR C 86 42.755 38.502 159.666 1.00 2.93
	ATOM 3495 CG TYR C 86 41.318 38.103 159.605 1.00 12.31
	ATOM 3496 CD1 TYR C 86 40.711 37.476 160.678 1.00 14.13
	ATOM 3497 CD2 TYR C 86 40.555 38.384 158.493 1.00 17.49
25	ATOM 3498 CE1 TYR C 86 39.388 37.149 160.649 1.00 12.56

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		ATOM	3499	CE2	TYR	C	86	39.228	38.051	158.449	1.00	18.99
		ATOM	3500	CZ	TYR	C	86	38.643	37.435	159.537	1.00	18.93
		ATOM	3501	OH	TYR	C	86	37.294	37.126	159.509	1.00	33.92
		ATOM	3502	N	GLN	C	87	45.046	40.760	160.362	1.00	17.18
5		ATOM	3503	CA	GLN	C	87	46.461	41.056	160.540	1.00	23.41
		ATOM	3504	C	GLN	C	87	46.654	41.379	162.000	1.00	19.51
		ATOM	3505	O	GLN	C	87	47.641	40.987	162.608	1.00	37.01
		ATOM	3506	CB	GLN	C	87	46.879	42.261	159.698	1.00	26.00
		ATOM	3507	CG	GLN	C	87	48.348	42.572	159.807	1.00	24.54
10		ATOM	3508	CD	GLN	C	87	48.710	43.890	159.186	1.00	33.02
		ATOM	3509	OE1	GLN	C	87	49.387	44.710	159.807	1.00	59.63
		ATOM	3510	NE2	GLN	C	87	48.274	44.107	157.955	1.00	32.94
		ATOM	3511	N	GLY	C	88	45.673	42.070	162.556	1.00	13.71
		ATOM	3512	CA	GLY	C	88	45.711	42.460	163.951	1.00	19.65
15		ATOM	3513	C	GLY	C	88	45.375	41.329	164.891	1.00	21.74
		ATOM	3514	O	GLY	C	88	46.089	41.094	165.856	1.00	24.19
		ATOM	3515	N	LEU	C	89	44.290	40.623	164.620	1.00	15.66
		ATOM	3516	CA	LEU	C	89	43.930	39.506	165.460	1.00	7.95
		ATOM	3517	C	LEU	C	89	45.112	38.559	165.581	1.00	14.39
20		ATOM	3518	O	LEU	C	89	45.483	38.192	166.682	1.00	26.94
		ATOM	3519	CB	LEU	C	89	42.737	38.759	164.877	1.00	4.12
		ATOM	3520	CG	LEU	C	89	41.424	39.526	164.870	1.00	7.35
		ATOM	3521	CD1	LEU	C	89	40.312	38.661	164.357	1.00	2.00
		ATOM	3522	CD2	LEU	C	89	41.131	39.952	166.265	1.00	8.42
25		ATOM	3523	N	LEU	C	90	45.742	38.210	164.462	1.00	16.35

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	ATOM	3524	CA	LEU	C	90	46.879	37.296	164.498	1.00	11.45
	ATOM	3525	C	LEU	C	90	48.020	37.876	165.331	1.00	9.74
	ATOM	3526	O	LEU	C	90	48.776	37.127	165.942	1.00	22.57
	ATOM	3527	CB	LEU	C	90	47.350	36.923	163.081	1.00	2.00
5	ATOM	3528	CG	LEU	C	90	46.356	36.243	162.123	1.00	3.04
	ATOM	3529	CD1	LEU	C	90	46.878	36.291	160.701	1.00	9.85
	ATOM	3530	CD2	LEU	C	90	46.109	34.822	162.530	1.00	6.66
	ATOM	3531	N	GLN	C	91	48.140	39.201	165.383	1.00	10.18
	ATOM	3532	CA	GLN	C	91	49.218	39.813	166.168	1.00	29.67
10	ATOM	3533	C	GLN	C	91	48.910	39.729	167.655	1.00	33.14
	ATOM	3534	O	GLN	C	91	49.812	39.569	168.472	1.00	44.25
	ATOM	3535	CB	GLN	C	91	49.461	41.275	165.787	1.00	45.65
	ATOM	3536	CG	GLN	C	91	50.525	41.496	164.710	1.00	75.72
	ATOM	3537	CD	GLN	C	91	50.775	42.979	164.421	1.00	92.73
15	ATOM	3538	OE1	GLN	C	91	51.216	43.727	165.299	1.00	99.43
	ATOM	3539	NE2	GLN	C	91	50.495	43.406	163.187	1.00	95.79
	ATOM	3540	N	ALA	C	92	47.627	39.792	167.996	1.00	35.67
	ATOM	3541	CA	ALA	C	92	47.172	39.726	169.388	1.00	29.56
	ATOM	3542	C	ALA	C	92	47.417	38.373	170.038	1.00	29.29
20	ATOM	3543	O	ALA	C	92	47.482	38.274	171.264	1.00	41.00
	ATOM	3544	CB	ALA	C	92	45.695	40.071	169.473	1.00	29.81
	ATOM	3545	N	LEU	C	93	47.520	37.332	169.216	1.00	21.89
	ATOM	3546	CA	LEU	C	93	47.768	35.977	169.687	1.00	6.09
	ATOM	3547	C	LEU	C	93	49.187	35.842	170.180	1.00	12.86
25	ATOM	3548	O	LEU	C	93	49.634	34.740	170.437	1.00	15.59

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	ATOM	3549	CB	LEU	C	93	47.572	34.974	168.561	1.00	2.00
	ATOM	3550	CG	LEU	C	93	46.142	34.803	168.091	1.00	7.60
	ATOM	3551	CD1	LEU	C	93	46.051	33.839	166.945	1.00	2.40
	ATOM	3552	CD2	LEU	C	93	45.337	34.282	169.241	1.00	26.53
5	ATOM	3553	N	GLU	C	94	49.912	36.953	170.213	1.00	14.59
	ATOM	3554	CA	GLU	C	94	51.296	37.009	170.652	1.00	21.72
	ATOM	3555	C	GLU	C	94	52.092	35.712	170.435	1.00	15.18
	ATOM	3556	O	GLU	C	94	52.738	35.207	171.340	1.00	32.11
	ATOM	3557	CB	GLU	C	94	51.357	37.530	172.096	1.00	40.42
10	ATOM	3558	CG	GLU	C	94	50.864	39.002	172.263	1.00	66.86
	ATOM	3559	CD	GLU	C	94	50.017	39.261	173.532	1.00	87.53
	ATOM	3560	OE1	GLU	C	94	49.056	40.068	173.463	1.00	83.40
	ATOM	3561	OE2	GLU	C	94	50.312	38.675	174.598	1.00	102.30
	ATOM	3562	N	GLY	C	95	52.010	35.174	169.221	1.00	15.54
15	ATOM	3563	CA	GLY	C	95	52.731	33.963	168.847	1.00	10.79
	ATOM	3564	C	GLY	C	95	52.140	32.622	169.259	1.00	19.04
	ATOM	3565	O	GLY	C	95	52.579	31.575	168.775	1.00	17.08
	ATOM	3566	N	ILE	C	96	51.136	32.655	170.131	1.00	15.51
	ATOM	3567	CA	ILE	C	96	50.485	31.466	170.678	1.00	13.74
20	ATOM	3568	C	ILE	C	96	51.392	30.699	171.661	1.00	16.06
	ATOM	3569	O	ILE	C	96	51.066	30.559	172.839	1.00	35.34
	ATOM	3570	CB	ILE	C	96	49.959	30.550	169.603	1.00	4.36
	ATOM	3571	CG1	ILE	C	96	48.937	31.310	168.760	1.00	14.38
	ATOM	3572	CG2	ILE	C	96	49.306	29.344	170.249	1.00	19.46
25	ATOM	3573	CD1	ILE	C	96	48.190	30.457	167.734	1.00	5.18

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	ATOM 3574 N	SER C	97	52.529	30.215	171.187	1.00	19.21
	ATOM 3575 CA	SER C	97	53.481	29.514	172.034	1.00	18.12
	ATOM 3576 C	SER C	97	54.690	29.245	171.181	1.00	27.03
	ATOM 3577 O	SER C	97	54.621	29.301	169.963	1.00	35.89
5	ATOM 3578 CB	SER C	97	52.914	28.194	172.516	1.00	24.16
	ATOM 3579 OG	SER C	97	52.945	27.253	171.475	1.00	16.86
	ATOM 3580 N	PRO C	98	55.821	28.947	171.808	1.00	31.32
	ATOM 3581 CA	PRO C	98	57.064	28.666	171.088	1.00	25.50
	ATOM 3582 C	PRO C	98	56.958	27.630	169.976	1.00	25.30
10	ATOM 3583 O	PRO C	98	57.593	27.764	168.939	1.00	33.22
	ATOM 3584 CB	PRO C	98	57.974	28.223	172.204	1.00	19.42
	ATOM 3585 CG	PRO C	98	57.561	29.177	173.301	1.00	22.85
	ATOM 3586 CD	PRO C	98	56.069	29.059	173.254	1.00	27.34
	ATOM 3587 N	GLU C	99	56.149	26.604	170.178	1.00	29.21
15	ATOM 3588 CA	GLU C	99	55.988	25.573	169.160	1.00	37.82
	ATOM 3589 C	GLU C	99	55.309	26.130	167.903	1.00	31.34
	ATOM 3590 O	GLU C	99	55.588	25.705	166.786	1.00	44.97
	ATOM 3591 CB	GLU C	99	55.146	24.421	169.716	1.00	56.72
	ATOM 3592 CG	GLU C	99	55.715	23.726	170.945	1.00	96.89
20	ATOM 3593 CD	GLU C	99	56.782	22.702	170.602	1.00	120.73
	ATOM 3594 OE1	GLU C	99	56.511	21.802	169.771	1.00	130.44
	ATOM 3595 OE2	GLU C	99	57.891	22.793	171.175	1.00	131.47
	ATOM 3596 N	LEU C	100	54.417	27.088	168.095	1.00	23.62
	ATOM 3597 CA	LEU C	100	53.671	27.669	166.994	1.00	21.66
25	ATOM 3598 C	LEU C	100	54.123	28.993	166.401	1.00	20.83

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		ATOM	3599	O	LEU	C	100	53.787	29.314	165.260	1.00	29.44
		ATOM	3600	CB	LEU	C	100	52.202	27.746	167.355	1.00	6.35
		ATOM	3601	CG	LEU	C	100	51.553	26.448	166.940	1.00	8.68
		ATOM	3602	CD1	LEU	C	100	51.784	25.444	167.992	1.00	3.15
5		ATOM	3603	CD2	LEU	C	100	50.099	26.657	166.713	1.00	27.12
		ATOM	3604	N	GLY	C	101	54.888	29.752	167.164	1.00	20.83
		ATOM	3605	CA	GLY	C	101	55.385	31.032	166.697	1.00	30.70
		ATOM	3606	C	GLY	C	101	55.794	31.069	165.237	1.00	25.79
		ATOM	3607	O	GLY	C	101	55.370	31.970	164.513	1.00	29.04
10		ATOM	3608	N	PRO	C	102	56.625	30.123	164.776	1.00	19.79
		ATOM	3609	CA	PRO	C	102	57.061	30.090	163.386	1.00	14.68
		ATOM	3610	C	PRO	C	102	55.904	29.994	162.426	1.00	14.64
		ATOM	3611	O	PRO	C	102	55.725	30.858	161.569	1.00	25.92
		ATOM	3612	CB	PRO	C	102	57.918	28.841	163.343	1.00	18.20
15		ATOM	3613	CG	PRO	C	102	58.559	28.860	164.661	1.00	6.81
		ATOM	3614	CD	PRO	C	102	57.375	29.123	165.554	1.00	22.94
		ATOM	3615	N	THR	C	103	55.095	28.964	162.595	1.00	11.79
		ATOM	3616	CA	THR	C	103	53.946	28.765	161.718	1.00	10.86
		ATOM	3617	C	THR	C	103	52.989	29.964	161.684	1.00	9.48
20		ATOM	3618	O	THR	C	103	52.479	30.337	160.636	1.00	13.57
		ATOM	3619	CB	THR	C	103	53.180	27.514	162.109	1.00	7.30
		ATOM	3620	OG1	THR	C	103	54.084	26.408	162.199	1.00	29.49
		ATOM	3621	CG2	THR	C	103	52.123	27.206	161.097	1.00	26.85
		ATOM	3622	N	LEU	C	104	52.771	30.592	162.821	1.00	7.56
25		ATOM	3623	CA	LEU	C	104	51.881	31.732	162.864	1.00	2.13

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		ATOM 3624	C	LEU	C	104	52.528	32.948	162.227	1.00	8.30
		ATOM 3625	O	LEU	C	104	51.885	33.663	161.478	1.00	20.48
		ATOM 3626	CB	LEU	C	104	51.495	32.025	164.309	1.00	2.00
		ATOM 3627	CG	LEU	C	104	50.609	33.228	164.565	1.00	2.00
5		ATOM 3628	CD1	LEU	C	104	49.270	32.961	163.944	1.00	13.22
		ATOM 3629	CD2	LEU	C	104	50.472	33.508	166.041	1.00	7.42
		ATOM 3630	N	ASP	C	105	53.810	33.159	162.488	1.00	17.98
		ATOM 3631	CA	ASP	C	105	54.519	34.301	161.933	1.00	18.89
		ATOM 3632	C	ASP	C	105	54.436	34.279	160.412	1.00	20.17
10		ATOM 3633	O	ASP	C	105	54.277	35.315	159.767	1.00	17.22
		ATOM 3634	CB	ASP	C	105	55.976	34.289	162.383	1.00	29.92
		ATOM 3635	CG	ASP	C	105	56.670	35.615	162.150	1.00	62.55
		ATOM 3636	OD1	ASP	C	105	56.209	36.641	162.699	1.00	70.88
		ATOM 3637	OD2	ASP	C	105	57.686	35.633	161.424	1.00	76.41
15		ATOM 3638	N	THR	C	106	54.525	33.095	159.829	1.00	16.59
		ATOM 3639	CA	THR	C	106	54.432	32.993	158.386	1.00	7.81
		ATOM 3640	C	THR	C	106	53.069	33.469	157.959	1.00	5.01
		ATOM 3641	O	THR	C	106	52.962	34.331	157.121	1.00	12.31
		ATOM 3642	CB	THR	C	106	54.634	31.571	157.917	1.00	7.78
20		ATOM 3643	OG1	THR	C	106	55.991	31.182	158.157	1.00	27.20
		ATOM 3644	CG2	THR	C	106	54.324	31.453	156.462	1.00	8.41
		ATOM 3645	N	LEU	C	107	52.024	32.933	158.561	1.00	5.97
		ATOM 3646	CA	LEU	C	107	50.680	33.344	158.216	1.00	2.00
		ATOM 3647	C	LEU	C	107	50.480	34.825	158.376	1.00	2.00
25		ATOM 3648	O	LEU	C	107	49.854	35.437	157.549	1.00	14.00

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		ATOM 3649	CB	LEU	C	107	49.665	32.648	159.087	1.00	2.00
		ATOM 3650	CG	LEU	C	107	48.254	33.147	158.852	1.00	2.00
		ATOM 3651	CD1	LEU	C	107	47.910	33.104	157.372	1.00	5.30
		ATOM 3652	CD2	LEU	C	107	47.302	32.285	159.644	1.00	11.46
5		ATOM 3653	N	GLN	C	108	51.014	35.397	159.442	1.00	5.05
		ATOM 3654	CA	GLN	C	108	50.885	36.831	159.745	1.00	7.64
		ATOM 3655	C	GLN	C	108	51.578	37.705	158.675	1.00	11.01
		ATOM 3656	O	GLN	C	108	51.001	38.678	158.177	1.00	14.74
		ATOM 3657	CB	GLN	C	108	51.503	37.083	161.129	1.00	2.00
10		ATOM 3658	CG	GLN	C	108	51.172	38.341	161.913	1.00	23.76
		ATOM 3659	CD	GLN	C	108	51.371	39.679	161.192	1.00	46.10
		ATOM 3660	OE1	GLN	C	108	52.475	40.033	160.761	1.00	63.30
		ATOM 3661	NE2	GLN	C	108	50.301	40.469	161.140	1.00	37.11
		ATOM 3662	N	LEU	C	109	52.813	37.376	158.331	1.00	6.86
15		ATOM 3663	CA	LEU	C	109	53.534	38.145	157.330	1.00	2.92
		ATOM 3664	C	LEU	C	109	52.808	38.115	155.990	1.00	7.14
		ATOM 3665	O	LEU	C	109	52.582	39.151	155.358	1.00	22.53
		ATOM 3666	CB	LEU	C	109	54.954	37.595	157.177	1.00	9.95
		ATOM 3667	CG	LEU	C	109	55.908	37.953	158.320	1.00	9.74
20		ATOM 3668	CD1	LEU	C	109	57.163	37.178	158.149	1.00	15.22
		ATOM 3669	CD2	LEU	C	109	56.199	39.458	158.312	1.00	16.37
		ATOM 3670	N	ASP	C	110	52.403	36.922	155.579	1.00	3.49
		ATOM 3671	CA	ASP	C	110	51.688	36.754	154.329	1.00	4.69
		ATOM 3672	C	ASP	C	110	50.394	37.557	154.311	1.00	3.37
25		ATOM 3673	O	ASP	C	110	50.039	38.109	153.287	1.00	16.18

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		ATOM	3674	CB	ASP	C	110	51.475	35.263	154.009	1.00	2.00
		ATOM	3675	CG	ASP	C	110	52.771	34.578	153.514	1.00	15.41
		ATOM	3676	OD1	ASP	C	110	53.470	35.145	152.652	1.00	38.84
		ATOM	3677	OD2	ASP	C	110	53.118	33.477	153.969	1.00	26.53
5		ATOM	3678	N	VAL	C	111	49.738	37.704	155.453	1.00	10.56
		ATOM	3679	CA	VAL	C	111	48.507	38.487	155.511	1.00	5.23
		ATOM	3680	C	VAL	C	111	48.844	39.970	155.474	1.00	6.18
		ATOM	3681	O	VAL	C	111	48.188	40.751	154.818	1.00	6.98
		ATOM	3682	CB	VAL	C	111	47.705	38.217	156.787	1.00	2.14
10		ATOM	3683	CG1	VAL	C	111	46.601	39.234	156.907	1.00	3.60
		ATOM	3684	CG2	VAL	C	111	47.095	36.812	156.768	1.00	10.64
		ATOM	3685	N	ALA	C	112	49.893	40.358	156.169	1.00	6.02
		ATOM	3686	CA	ALA	C	112	50.281	41.751	156.187	1.00	7.01
		ATOM	3687	C	ALA	C	112	50.587	42.264	154.786	1.00	13.64
15		ATOM	3688	O	ALA	C	112	50.089	43.305	154.366	1.00	26.24
		ATOM	3689	CB	ALA	C	112	51.474	41.931	157.077	1.00	10.81
		ATOM	3690	N	ASP	C	113	51.395	41.514	154.059	1.00	4.68
		ATOM	3691	CA	ASP	C	113	51.795	41.892	152.715	1.00	8.17
		ATOM	3692	C	ASP	C	113	50.631	41.962	151.760	1.00	10.40
20		ATOM	3693	O	ASP	C	113	50.585	42.811	150.892	1.00	19.46
		ATOM	3694	CB	ASP	C	113	52.803	40.882	152.162	1.00	14.52
		ATOM	3695	CG	ASP	C	113	54.120	40.906	152.899	1.00	24.04
		ATOM	3696	OD1	ASP	C	113	54.203	41.510	153.983	1.00	40.09
		ATOM	3697	OD2	ASP	C	113	55.086	40.318	152.389	1.00	24.64
25		ATOM	3698	N	PHE	C	114	49.723	41.013	151.867	1.00	11.79

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		ATOM 3699	CA	PHE	C	114	48.581	41.008	150.988	1.00	2.28
		ATOM 3700	C	PHE	C	114	47.770	42.258	151.238	1.00	7.52
		ATOM 3701	O	PHE	C	114	47.243	42.864	150.320	1.00	15.03
		ATOM 3702	CB	PHE	C	114	47.726	39.795	151.236	1.00	2.00
5		ATOM 3703	CG	PHE	C	114	46.640	39.654	150.271	1.00	2.00
		ATOM 3704	CD1	PHE	C	114	46.653	40.376	149.081	1.00	2.00
		ATOM 3705	CD2	PHE	C	114	45.580	38.820	150.531	1.00	5.07
		ATOM 3706	CE1	PHE	C	114	45.623	40.275	148.164	1.00	2.00
		ATOM 3707	CE2	PHE	C	114	44.535	38.704	149.618	1.00	2.00
10		ATOM 3708	CZ	PHE	C	114	44.558	39.436	148.438	1.00	7.72
		ATOM 3709	N	ALA	C	115	47.644	42.641	152.490	1.00	10.11
		ATOM 3710	CA	ALA	C	115	46.903	43.848	152.810	1.00	10.33
		ATOM 3711	C	ALA	C	115	47.644	45.052	152.227	1.00	15.85
		ATOM 3712	O	ALA	C	115	47.036	45.928	151.627	1.00	27.89
15		ATOM 3713	CB	ALA	C	115	46.765	43.994	154.300	1.00	9.28
		ATOM 3714	N	THR	C	116	48.963	45.081	152.390	1.00	14.87
		ATOM 3715	CA	THR	C	116	49.813	46.160	151.875	1.00	2.00
		ATOM 3716	C	THR	C	116	49.700	46.310	150.361	1.00	2.00
		ATOM 3717	O	THR	C	116	49.486	47.378	149.831	1.00	12.12
20		ATOM 3718	CB	THR	C	116	51.237	45.849	152.199	1.00	2.00
		ATOM 3719	OG1	THR	C	116	51.399	45.776	153.625	1.00	18.66
		ATOM 3720	CG2	THR	C	116	52.115	46.876	151.618	1.00	7.39
		ATOM 3721	N	THR	C	117	49.920	45.209	149.680	1.00	7.43
		ATOM 3722	CA	THR	C	117	49.804	45.092	148.244	1.00	2.00
25		ATOM 3723	C	THR	C	117	48.484	45.696	147.754	1.00	2.00

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	ATOM 3724 O	THR C 117	48.481	46.467	146.802	1.00	19.66
	ATOM 3725 CB	THR C 117	49.906	43.567	147.896	1.00	9.36
	ATOM 3726 OG1	THR C 117	51.280	43.163	147.971	1.00	27.58
	ATOM 3727 CG2	THR C 117	49.251	43.177	146.544	1.00	2.00
5	ATOM 3728 N	ILE C 118	47.368	45.363	148.403	1.00	9.24
	ATOM 3729 CA	ILE C 118	46.051	45.874	147.994	1.00	2.78
	ATOM 3730 C	ILE C 118	45.977	47.362	148.210	1.00	9.63
	ATOM 3731 O	ILE C 118	45.466	48.089	147.370	1.00	12.89
	ATOM 3732 CB	ILE C 118	44.898	45.243	148.774	1.00	2.00
10	ATOM 3733 CG1	ILE C 118	44.815	43.754	148.494	1.00	2.22
	ATOM 3734 CG2	ILE C 118	43.597	45.873	148.376	1.00	2.00
	ATOM 3735 CD1	ILE C 118	43.443	43.173	148.831	1.00	16.14
	ATOM 3736 N	TRP C 119	46.519	47.819	149.325	1.00	9.14
	ATOM 3737 CA	TRP C 119	46.502	49.234	149.630	1.00	10.18
15	ATOM 3738 C	TRP C 119	47.223	50.015	148.555	1.00	12.76
	ATOM 3739 O	TRP C 119	46.668	50.926	147.950	1.00	34.83
	ATOM 3740 CB	TRP C 119	47.170	49.490	150.964	1.00	10.85
	ATOM 3741 CG	TRP C 119	47.074	50.877	151.352	1.00	8.82
	ATOM 3742 CD1	TRP C 119	48.062	51.796	151.325	1.00	19.08
20	ATOM 3743 CD2	TRP C 119	45.893	51.553	151.781	1.00	11.53
	ATOM 3744 NE1	TRP C 119	47.572	53.015	151.701	1.00	22.99
	ATOM 3745 CE2	TRP C 119	46.239	52.892	151.991	1.00	13.48
	ATOM 3746 CE3	TRP C 119	44.568	51.149	152.016	1.00	14.22
	ATOM 3747 CZ2	TRP C 119	45.310	53.847	152.427	1.00	26.63
25	ATOM 3748 CZ3	TRP C 119	43.645	52.097	152.452	1.00	13.39

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	ATOM 3749 CH2 TRP C 119 44.023 53.431 152.652 1.00 17.32
	ATOM 3750 N GLN C 120 48.459 49.632 148.291 1.00 11.47
	ATOM 3751 CA GLN C 120 49.276 50.298 147.279 1.00 12.84
	ATOM 3752 C GLN C 120 48.672 50.293 145.896 1.00 9.36
5	ATOM 3753 O GLN C 120 48.860 51.235 145.154 1.00 18.14
	ATOM 3754 CB GLN C 120 50.663 49.680 147.233 1.00 3.60
	ATOM 3755 CG GLN C 120 51.293 49.674 148.599 1.00 16.67
	ATOM 3756 CD GLN C 120 52.719 49.237 148.588 1.00 20.35
	ATOM 3757 OE1 GLN C 120 53.115 48.377 147.803 1.00 21.78
10	ATOM 3758 NE2 GLN C 120 53.512 49.816 149.482 1.00 39.79
	ATOM 3759 N GLN C 121 47.926 49.252 145.554 1.00 6.37
	ATOM 3760 CA GLN C 121 47.303 49.203 144.244 1.00 5.48
	ATOM 3761 C GLN C 121 46.216 50.239 144.243 1.00 14.37
	ATOM 3762 O GLN C 121 46.096 51.017 143.308 1.00 23.59
15	ATOM 3763 CB GLN C 121 46.689 47.838 143.970 1.00 20.16
	ATOM 3764 CG GLN C 121 46.213 47.674 142.540 1.00 31.20
	ATOM 3765 CD GLN C 121 47.335 47.829 141.515 1.00 35.19
	ATOM 3766 OE1 GLN C 121 47.079 48.125 140.351 1.00 31.37
	ATOM 3767 NE2 GLN C 121 48.576 47.606 141.938 1.00 33.60
20	ATOM 3768 N MET C 122 45.441 50.264 145.319 1.00 21.16
	ATOM 3769 CA MET C 122 44.368 51.226 145.450 1.00 11.07
	ATOM 3770 C MET C 122 44.910 52.650 145.327 1.00 18.71
	ATOM 3771 O MET C 122 44.302 53.488 144.653 1.00 23.46
	ATOM 3772 CB MET C 122 43.621 51.024 146.767 1.00 2.18
25	ATOM 3773 CG MET C 122 42.732 49.792 146.754 1.00 16.40

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	ATOM 3774 SD	MET C 122	41.471	49.768	148.062	1.00	17.55
	ATOM 3775 CE	MET C 122	42.509	50.172	149.447	1.00	7.01
	ATOM 3776 N	GLU C 123	46.062	52.927	145.933	1.00	10.34
	ATOM 3777 CA	GLU C 123	46.616	54.267	145.829	1.00	22.20
5	ATOM 3778 C	GLU C 123	46.981	54.590	144.380	1.00	18.15
	ATOM 3779 O	GLU C 123	46.586	55.620	143.858	1.00	20.93
	ATOM 3780 CB	GLU C 123	47.834	54.424	146.724	1.00	26.46
	ATOM 3781 CG	GLU C 123	47.534	54.188	148.166	1.00	34.64
	ATOM 3782 CD	GLU C 123	48.574	54.797	149.081	1.00	52.48
10	ATOM 3783 OE1	GLU C 123	49.756	54.372	149.039	1.00	59.08
	ATOM 3784 OE2	GLU C 123	48.201	55.710	149.848	1.00	64.26
	ATOM 3785 N	GLU C 124	47.702	53.679	143.733	1.00	21.09
	ATOM 3786 CA	GLU C 124	48.136	53.830	142.347	1.00	15.37
	ATOM 3787 C	GLU C 124	46.951	54.188	141.442	1.00	12.11
15	ATOM 3788 O	GLU C 124	47.076	54.997	140.534	1.00	27.26
	ATOM 3789 CB	GLU C 124	48.810	52.530	141.893	1.00	27.39
	ATOM 3790 CG	GLU C 124	49.505	52.556	140.534	1.00	77.99
	ATOM 3791 CD	GLU C 124	50.113	51.203	140.162	1.00	96.26
	ATOM 3792 OE1	GLU C 124	50.931	50.674	140.952	1.00	106.93
20	ATOM 3793 OE2	GLU C 124	49.771	50.667	139.082	1.00	105.23
	ATOM 3794 N	LEU C 125	45.786	53.622	141.722	1.00	9.65
	ATOM 3795 CA	LEU C 125	44.600	53.892	140.917	1.00	16.69
	ATOM 3796 C	LEU C 125	43.729	55.026	141.434	1.00	25.47
	ATOM 3797 O	LEU C 125	42.725	55.376	140.810	1.00	32.21
25	ATOM 3798 CB	LEU C 125	43.723	52.651	140.828	1.00	9.04

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		ATOM 3799	CG	LEU	C	125	44.324	51.323	140.391	1.00	24.95
		ATOM 3800	CD1	LEU	C	125	43.174	50.364	140.273	1.00	12.37
		ATOM 3801	CD2	LEU	C	125	45.078	51.437	139.059	1.00	26.14
		ATOM 3802	N	GLY	C	126	44.081	55.576	142.584	1.00	27.63
5		ATOM 3803	CA	GLY	C	126	43.273	56.632	143.147	1.00	25.45
		ATOM 3804	C	GLY	C	126	41.946	56.080	143.636	1.00	32.05
		ATOM 3805	O	GLY	C	126	40.928	56.755	143.547	1.00	44.72
		ATOM 3806	N	MET	C	127	41.948	54.841	144.125	1.00	31.14
		ATOM 3807	CA	MET	C	127	40.736	54.197	144.635	1.00	28.69
10		ATOM 3808	C	MET	C	127	40.791	54.013	146.141	1.00	29.39
		ATOM 3809	O	MET	C	127	39.848	53.471	146.727	1.00	35.42
		ATOM 3810	CB	MET	C	127	40.557	52.809	144.033	1.00	22.33
		ATOM 3811	CG	MET	C	127	40.473	52.745	142.539	1.00	41.96
		ATOM 3812	SD	MET	C	127	40.561	51.029	141.987	1.00	40.40
15		ATOM 3813	CE	MET	C	127	38.982	50.929	141.090	1.00	56.15
		ATOM 3814	N	ALA	C	128	41.905	54.419	146.757	1.00	30.60
		ATOM 3815	CA	ALA	C	128	42.114	54.259	148.203	1.00	29.62
		ATOM 3816	C	ALA	C	128	41.071	55.007	149.016	1.00	33.26
		ATOM 3817	O	ALA	C	128	40.709	56.131	148.668	1.00	51.34
20		ATOM 3818	CB	ALA	C	128	43.527	54.721	148.610	1.00	19.18
		ATOM 3819	N	PRO	C	129	40.537	54.375	150.083	1.00	33.48
		ATOM 3820	CA	PRO	C	129	39.537	55.025	150.921	1.00	24.94
		ATOM 3821	C	PRO	C	129	40.139	56.319	151.450	1.00	20.92
		ATOM 3822	O	PRO	C	129	41.358	56.416	151.634	1.00	25.51
25		ATOM 3823	CB	PRO	C	129	39.331	54.002	152.036	1.00	23.26

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	ATOM	3824	CG	PRO	C	129	39.475	52.723	151.327	1.00	20.18
	ATOM	3825	CD	PRO	C	129	40.733	52.985	150.531	1.00	42.15
	ATOM	3826	N	ALA	C	130	39.285	57.317	151.651	1.00	20.74
	ATOM	3827	CA	ALA	C	130	39.717	58.618	152.141	1.00	29.99
5	ATOM	3828	C	ALA	C	130	40.085	58.583	153.613	1.00	39.40
	ATOM	3829	O	ALA	C	130	40.941	59.356	154.053	1.00	47.15
	ATOM	3830	CB	ALA	C	130	38.650	59.665	151.885	1.00	20.34
	ATOM	3831	N	LEU	C	131	39.441	57.699	154.374	1.00	49.97
	ATOM	3832	CA	LEU	C	131	39.724	57.574	155.798	1.00	60.81
10	ATOM	3833	C	LEU	C	131	40.586	56.322	156.014	1.00	68.79
	ATOM	3834	O	LEU	C	131	40.114	55.191	155.846	1.00	77.55
	ATOM	3835	CB	LEU	C	131	38.413	57.507	156.590	1.00	66.44
	ATOM	3836	CG	LEU	C	131	38.431	57.932	158.060	1.00	71.76
	ATOM	3837	CD1	LEU	C	131	39.023	59.322	158.197	1.00	84.58
15	ATOM	3838	CD2	LEU	C	131	37.018	57.908	158.607	1.00	77.06
	ATOM	3839	N	GLN	C	132	41.863	56.542	156.331	1.00	73.50
	ATOM	3840	CA	GLN	C	132	42.827	55.461	156.561	1.00	76.14
	ATOM	3841	C	GLN	C	132	42.420	54.714	157.831	1.00	71.88
	ATOM	3842	O	GLN	C	132	42.016	55.328	158.822	1.00	75.19
20	ATOM	3843	CB	GLN	C	132	44.248	56.028	156.705	1.00	88.57
	ATOM	3844	CG	GLN	C	132	44.541	57.273	155.840	1.00	104.51
	ATOM	3845	CD	GLN	C	132	45.158	56.965	154.486	1.00	108.80
	ATOM	3846	OE1	GLN	C	132	46.170	56.271	154.403	1.00	120.23
	ATOM	3847	NE2	GLN	C	132	44.580	57.519	153.425	1.00	105.13
25	ATOM	3848	N	PRO	C	133	42.525	53.381	157.813	1.00	67.56

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	ATOM 3849 CA	PRO C 133	42.181	52.476	158.909	1.00	73.08
	ATOM 3850 C	PRO C 133	42.944	52.642	160.210	1.00	85.07
	ATOM 3851 O	PRO C 133	44.176	52.648	160.225	1.00	83.21
	ATOM 3852 CB	PRO C 133	42.456	51.104	158.307	1.00	67.98
5	ATOM 3853 CG	PRO C 133	42.240	51.321	156.860	1.00	64.73
	ATOM 3854 CD	PRO C 133	42.961	52.609	156.644	1.00	62.17
	ATOM 3855 N	THR C 134	42.187	52.793	161.293	1.00	102.24
	ATOM 3856 CA	THR C 134	42.732	52.907	162.637	1.00	116.11
	ATOM 3857 C	THR C 134	42.327	51.572	163.232	1.00	119.16
10	ATOM 3858 O	THR C 134	41.163	51.167	163.126	1.00	121.21
	ATOM 3859 CB	THR C 134	42.070	54.047	163.444	1.00	123.64
	ATOM 3860 OG1	THR C 134	42.295	55.297	162.782	1.00	131.06
	ATOM 3861 CG2	THR C 134	42.647	54.112	164.863	1.00	130.64
	ATOM 3862 N	GLN C 135	43.289	50.866	163.807	1.00	120.37
15	ATOM 3863 CA	GLN C 135	43.006	49.563	164.377	1.00	119.71
	ATOM 3864 C	GLN C 135	41.897	49.622	165.409	1.00	119.45
	ATOM 3865 O	GLN C 135	41.826	50.557	166.208	1.00	121.56
	ATOM 3866 CB	GLN C 135	44.265	48.941	164.977	1.00	118.84
	ATOM 3867 CG	GLN C 135	44.141	47.438	165.201	1.00	114.26
20	ATOM 3868 CD	GLN C 135	43.687	46.687	163.949	1.00	106.55
	ATOM 3869 OE1	GLN C 135	42.489	46.587	163.667	1.00	104.37
	ATOM 3870 NE2	GLN C 135	44.645	46.161	163.194	1.00	99.75
	ATOM 3871 N	GLY C 136	41.005	48.642	165.341	1.00	118.89
	ATOM 3872 CA	GLY C 136	39.899	48.579	166.272	1.00	115.12
25	ATOM 3873 C	GLY C 136	40.299	48.004	167.618	1.00	111.04

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		ATOM 3874 O	GLY C 136	41.483	47.782	167.901	1.00	108.53
		ATOM 3875 N	ALA C 137	39.296	47.781	168.461	1.00	105.56
		ATOM 3876 CA	ALA C 137	39.506	47.220	169.789	1.00	95.01
		ATOM 3877 C	ALA C 137	39.954	45.784	169.613	1.00	84.12
5		ATOM 3878 O	ALA C 137	39.180	44.923	169.173	1.00	82.94
		ATOM 3879 CB	ALA C 137	38.217	47.274	170.598	1.00	102.51
		ATOM 3880 N	MET C 138	41.208	45.530	169.947	1.00	66.73
		ATOM 3881 CA	MET C 138	41.745	44.197	169.792	1.00	59.43
		ATOM 3882 C	MET C 138	41.517	43.280	170.985	1.00	56.02
10		ATOM 3883 O	MET C 138	41.961	43.585	172.091	1.00	64.30
		ATOM 3884 CB	MET C 138	43.229	44.282	169.442	1.00	64.70
		ATOM 3885 CG	MET C 138	43.499	44.746	168.007	1.00	55.64
		ATOM 3886 SD	MET C 138	42.908	43.577	166.754	1.00	48.97
		ATOM 3887 CE	MET C 138	41.276	44.265	166.337	1.00	43.77
15		ATOM 3888 N	PRO C 139	40.788	42.158	170.781	1.00	51.93
		ATOM 3889 CA	PRO C 139	40.504	41.192	171.842	1.00	44.50
		ATOM 3890 C	PRO C 139	41.791	40.699	172.451	1.00	40.97
		ATOM 3891 O	PRO C 139	42.769	40.485	171.745	1.00	39.10
		ATOM 3892 CB	PRO C 139	39.782	40.067	171.100	1.00	37.22
20		ATOM 3893 CG	PRO C 139	40.238	40.201	169.725	1.00	41.72
		ATOM 3894 CD	PRO C 139	40.188	41.689	169.526	1.00	57.06
		ATOM 3895 N	ALA C 140	41.798	40.572	173.770	1.00	44.83
		ATOM 3896 CA	ALA C 140	42.977	40.115	174.484	1.00	48.33
		ATOM 3897 C	ALA C 140	42.926	38.620	174.676	1.00	47.98
25		ATOM 3898 O	ALA C 140	41.885	38.036	175.016	1.00	50.18

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		ATOM 3924	C	ALA C 144	46.553	29.457	176.118	1.00	16.26
		ATOM 3925	O	ALA C 144	46.530	29.472	174.891	1.00	24.77
		ATOM 3926	CB	ALA C 144	48.555	28.961	177.496	1.00	5.34
		ATOM 3927	N	PHE C 145	45.564	28.941	176.836	1.00	12.94
5		ATOM 3928	CA	PHE C 145	44.437	28.354	176.163	1.00	12.32
		ATOM 3929	C	PHE C 145	43.708	29.375	175.298	1.00	14.13
		ATOM 3930	O	PHE C 145	43.305	29.064	174.175	1.00	14.73
		ATOM 3931	CB	PHE C 145	43.472	27.729	177.147	1.00	5.88
		ATOM 3932	CG	PHE C 145	42.297	27.086	176.482	1.00	10.89
10		ATOM 3933	CD1	PHE C 145	42.467	25.937	175.706	1.00	2.00
		ATOM 3934	CD2	PHE C 145	41.030	27.669	176.573	1.00	20.36
		ATOM 3935	CE1	PHE C 145	41.395	25.388	175.026	1.00	8.86
		ATOM 3936	CE2	PHE C 145	39.936	27.126	175.895	1.00	8.75
		ATOM 3937	CZ	PHE C 145	40.119	25.984	175.117	1.00	8.32
15		ATOM 3938	N	GLN C 146	43.551	30.593	175.795	1.00	14.61
		ATOM 3939	CA	GLN C 146	42.856	31.601	175.003	1.00	18.58
		ATOM 3940	C	GLN C 146	43.614	31.860	173.703	1.00	20.71
		ATOM 3941	O	GLN C 146	43.004	32.000	172.652	1.00	29.87
		ATOM 3942	CB	GLN C 146	42.648	32.892	175.788	1.00	21.35
20		ATOM 3943	CG	GLN C 146	41.623	32.797	176.908	1.00	18.02
		ATOM 3944	CD	GLN C 146	41.388	34.133	177.602	1.00	34.22
		ATOM 3945	OE1	GLN C 146	42.336	34.846	177.962	1.00	36.66
		ATOM 3946	NE2	GLN C 146	40.122	34.475	177.803	1.00	37.15
		ATOM 3947	N	ARG C 147	44.942	31.867	173.759	1.00	17.67
25		ATOM 3948	CA	ARG C 147	45.757	32.066	172.561	1.00	2.00

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	ATOM 3949 C	ARG C 147	45.642	30.873	171.603	1.00	8.67
	ATOM 3950 O	ARG C 147	45.596	31.051	170.409	1.00	20.76
	ATOM 3951 CB	ARG C 147	47.211	32.271	172.942	1.00	2.00
	ATOM 3952 CG	ARG C 147	47.515	33.590	173.574	1.00	2.00
5	ATOM 3953 CD	ARG C 147	48.962	33.655	174.062	1.00	16.06
	ATOM 3954 NE	ARG C 147	49.144	33.123	175.417	1.00	47.51
	ATOM 3955 CZ	ARG C 147	50.258	32.543	175.865	1.00	58.29
	ATOM 3956 NH1	ARG C 147	51.318	32.408	175.075	1.00	62.18
	ATOM 3957 NH2	ARG C 147	50.309	32.084	177.111	1.00	76.18
10	ATOM 3958 N	ARG C 148	45.575	29.658	172.131	1.00	16.12
	ATOM 3959 CA	ARG C 148	45.449	28.459	171.310	1.00	7.39
	ATOM 3960 C	ARG C 148	44.083	28.388	170.677	1.00	10.44
	ATOM 3961 O	ARG C 148	43.976	28.140	169.486	1.00	22.32
	ATOM 3962 CB	ARG C 148	45.687	27.212	172.150	1.00	8.98
15	ATOM 3963 CG	ARG C 148	46.997	27.280	172.901	1.00	25.19
	ATOM 3964 CD	ARG C 148	47.262	26.064	173.779	1.00	32.31
	ATOM 3965 NE	ARG C 148	48.579	26.154	174.414	1.00	28.55
	ATOM 3966 CZ	ARG C 148	49.111	25.210	175.178	1.00	17.29
	ATOM 3967 NH1	ARG C 148	48.441	24.084	175.414	1.00	22.55
20	ATOM 3968 NH2	ARG C 148	50.323	25.392	175.688	1.00	19.08
	ATOM 3969 N	ALA C 149	43.026	28.560	171.457	1.00	10.37
	ATOM 3970 CA	ALA C 149	41.701	28.528	170.861	1.00	14.52
	ATOM 3971 C	ALA C 149	41.532	29.723	169.930	1.00	18.80
	ATOM 3972 O	ALA C 149	40.997	29.575	168.833	1.00	29.73
25	ATOM 3973 CB	ALA C 149	40.641	28.526	171.905	1.00	22.38

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		ATOM 3974 N	GLY C 150	42.028	30.893	170.336	1.00	19.83
		ATOM 3975 CA	GLY C 150	41.929	32.084	169.498	1.00	19.01
		ATOM 3976 C	GLY C 150	42.534	31.821	168.123	1.00	25.91
		ATOM 3977 O	GLY C 150	41.987	32.190	167.078	1.00	31.97
5		ATOM 3978 N	GLY C 151	43.656	31.121	168.127	1.00	18.18
		ATOM 3979 CA	GLY C 151	44.319	30.783	166.894	1.00	10.04
		ATOM 3980 C	GLY C 151	43.401	29.979	166.013	1.00	12.68
		ATOM 3981 O	GLY C 151	43.159	30.331	164.866	1.00	25.87
		ATOM 3982 N	VAL C 152	42.838	28.917	166.551	1.00	9.05
10		ATOM 3983 CA	VAL C 152	41.952	28.093	165.746	1.00	11.62
		ATOM 3984 C	VAL C 152	40.815	28.890	165.166	1.00	11.83
		ATOM 3985 O	VAL C 152	40.445	28.711	164.009	1.00	25.97
		ATOM 3986 CB	VAL C 152	41.357	26.943	166.538	1.00	4.45
		ATOM 3987 CG1	VAL C 152	40.492	26.124	165.638	1.00	12.72
15		ATOM 3988 CG2	VAL C 152	42.447	26.082	167.088	1.00	2.00
		ATOM 3989 N	LEU C 153	40.289	29.801	165.964	1.00	10.24
		ATOM 3990 CA	LEU C 153	39.173	30.620	165.532	1.00	11.91
		ATOM 3991 C	LEU C 153	39.519	31.646	164.488	1.00	15.82
		ATOM 3992 O	LEU C 153	38.850	31.726	163.463	1.00	20.46
20		ATOM 3993 CB	LEU C 153	38.540	31.277	166.733	1.00	22.05
		ATOM 3994 CG	LEU C 153	37.893	30.213	167.621	1.00	23.12
		ATOM 3995 CD1	LEU C 153	37.410	30.849	168.900	1.00	26.90
		ATOM 3996 CD2	LEU C 153	36.750	29.517	166.886	1.00	5.12
		ATOM 3997 N	VAL C 154	40.548	32.439	164.751	1.00	11.97
25		ATOM 3998 CA	VAL C 154	40.977	33.438	163.796	1.00	7.00

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	ATOM 3999 C	VAL C 154	41.328	32.762	162.490	1.00	9.04
	ATOM 4000 O	VAL C 154	40.958	33.223	161.430	1.00	24.72
	ATOM 4001 CB	VAL C 154	42.177	34.146	164.290	1.00	4.58
	ATOM 4002 CG1	VAL C 154	42.641	35.130	163.269	1.00	13.07
5	ATOM 4003 CG2	VAL C 154	41.835	34.830	165.573	1.00	10.59
	ATOM 4004 N	ALA C 155	41.990	31.627	162.577	1.00	7.30
	ATOM 4005 CA	ALA C 155	42.368	30.883	161.403	1.00	6.34
	ATOM 4006 C	ALA C 155	41.120	30.462	160.675	1.00	6.48
	ATOM 4007 O	ALA C 155	41.068	30.446	159.462	1.00	17.92
10	ATOM 4008 CB	ALA C 155	43.138	29.665	161.823	1.00	3.50
	ATOM 4009 N	SER C 156	40.100	30.106	161.422	1.00	19.14
	ATOM 4010 CA	SER C 156	38.876	29.654	160.797	1.00	23.07
	ATOM 4011 C	SER C 156	38.108	30.783	160.139	1.00	18.67
	ATOM 4012 O	SER C 156	37.469	30.581	159.119	1.00	22.04
15	ATOM 4013 CB	SER C 156	38.003	28.938	161.818	1.00	22.79
	ATOM 4014 OG	SER C 156	37.065	28.111	161.165	1.00	48.07
	ATOM 4015 N	HIS C 157	38.176	31.974	160.719	1.00	22.92
	ATOM 4016 CA	HIS C 157	37.481	33.141	160.172	1.00	20.81
	ATOM 4017 C	HIS C 157	38.221	33.650	158.942	1.00	23.71
20	ATOM 4018 O	HIS C 157	37.614	33.968	157.925	1.00	24.14
	ATOM 4019 CB	HIS C 157	37.390	34.259	161.216	1.00	33.53
	ATOM 4020 CG	HIS C 157	36.426	33.986	162.335	1.00	47.41
	ATOM 4021 ND1	HIS C 157	36.136	34.916	163.313	1.00	55.13
	ATOM 4022 CD2	HIS C 157	35.671	32.898	162.621	1.00	54.09
25	ATOM 4023 CE1	HIS C 157	35.245	34.415	164.151	1.00	49.57

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		ATOM	4024	NE2	HIS	C	157	34.946	33.191	163.753	1.00	51.70
		ATOM	4025	N	LEU	C	158	39.541	33.710	159.043	1.00	22.33
		ATOM	4026	CA	LEU	C	158	40.363	34.160	157.954	1.00	7.48
		ATOM	4027	C	LEU	C	158	40.055	33.269	156.799	1.00	2.00
5		ATOM	4028	O	LEU	C	158	39.811	33.745	155.719	1.00	19.70
		ATOM	4029	CB	LEU	C	158	41.814	34.004	158.313	1.00	2.94
		ATOM	4030	CG	LEU	C	158	42.767	34.500	157.263	1.00	2.80
		ATOM	4031	CD1	LEU	C	158	42.519	35.960	157.023	1.00	2.00
		ATOM	4032	CD2	LEU	C	158	44.155	34.290	157.804	1.00	14.83
10		ATOM	4033	N	GLN	C	159	39.922	31.982	157.066	1.00	2.00
		ATOM	4034	CA	GLN	C	159	39.670	31.003	156.020	1.00	2.56
		ATOM	4035	C	GLN	C	159	38.373	31.220	155.292	1.00	8.86
		ATOM	4036	O	GLN	C	159	38.314	31.097	154.073	1.00	23.88
		ATOM	4037	CB	GLN	C	159	39.709	29.584	156.575	1.00	16.80
15		ATOM	4038	CG	GLN	C	159	40.241	28.532	155.582	1.00	49.22
		ATOM	4039	CD	GLN	C	159	41.758	28.617	155.353	1.00	62.73
		ATOM	4040	OE1	GLN	C	159	42.237	28.505	154.221	1.00	58.15
		ATOM	4041	NE2	GLN	C	159	42.514	28.798	156.434	1.00	76.01
		ATOM	4042	N	SER	C	160	37.325	31.534	156.031	1.00	11.51
20		ATOM	4043	CA	SER	C	160	36.026	31.778	155.407	1.00	15.96
		ATOM	4044	C	SER	C	160	36.069	33.089	154.645	1.00	18.95
		ATOM	4045	O	SER	C	160	35.422	33.236	153.613	1.00	14.68
		ATOM	4046	CB	SER	C	160	34.937	31.843	156.462	1.00	16.78
		ATOM	4047	OG	SER	C	160	35.006	30.680	157.267	1.00	54.69
25		ATOM	4048	N	PHE	C	161	36.856	34.030	155.156	1.00	14.66

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		ATOM	4049	CA	PHE	C	161	37.010	35.328	154.533	1.00	2.83
		ATOM	4050	C	PHE	C	161	37.717	35.170	153.201	1.00	13.91
		ATOM	4051	O	PHE	C	161	37.369	35.821	152.223	1.00	33.11
		ATOM	4052	CB	PHE	C	161	37.828	36.238	155.438	1.00	4.62
5		ATOM	4053	CG	PHE	C	161	38.047	37.607	154.884	1.00	2.00
		ATOM	4054	CD1	PHE	C	161	36.989	38.472	154.700	1.00	2.00
		ATOM	4055	CD2	PHE	C	161	39.328	38.048	154.585	1.00	18.32
		ATOM	4056	CE1	PHE	C	161	37.203	39.753	154.233	1.00	5.66
		ATOM	4057	CE2	PHE	C	161	39.555	39.338	154.112	1.00	13.06
10		ATOM	4058	CZ	PHE	C	161	38.495	40.189	153.937	1.00	7.90
		ATOM	4059	N	LEU	C	162	38.696	34.284	153.145	1.00	7.74
		ATOM	4060	CA	LEU	C	162	39.421	34.097	151.918	1.00	4.86
		ATOM	4061	C	LEU	C	162	38.661	33.254	150.905	1.00	12.40
		ATOM	4062	O	LEU	C	162	38.872	33.410	149.703	1.00	21.50
15		ATOM	4063	CB	LEU	C	162	40.805	33.541	152.198	1.00	3.21
		ATOM	4064	CG	LEU	C	162	41.722	34.382	153.091	1.00	6.56
		ATOM	4065	CD1	LEU	C	162	43.008	33.623	153.245	1.00	15.75
		ATOM	4066	CD2	LEU	C	162	41.985	35.772	152.526	1.00	9.16
		ATOM	4067	N	GLU	C	163	37.748	32.400	151.354	1.00	10.00
20		ATOM	4068	CA	GLU	C	163	36.986	31.600	150.396	1.00	15.90
		ATOM	4069	C	GLU	C	163	36.065	32.498	149.602	1.00	12.60
		ATOM	4070	O	GLU	C	163	35.938	32.345	148.396	1.00	33.58
		ATOM	4071	CB	GLU	C	163	36.208	30.481	151.077	1.00	19.57
		ATOM	4072	CG	GLU	C	163	37.132	29.404	151.630	1.00	71.02
25		ATOM	4073	CD	GLU	C	163	36.389	28.196	152.169	1.00	92.65

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		ATOM 4074	OE1	GLU	C	163	35.827	28.290	153.287	1.00	98.95
		ATOM 4075	OE2	GLU	C	163	36.376	27.152	151.473	1.00	111.90
		ATOM 4076	N	VAL	C	164	35.464	33.474	150.267	1.00	15.16
		ATOM 4077	CA	VAL	C	164	34.577	34.422	149.599	1.00	14.32
5		ATOM 4078	C	VAL	C	164	35.416	35.330	148.710	1.00	20.59
		ATOM 4079	O	VAL	C	164	35.083	35.545	147.549	1.00	37.42
		ATOM 4080	CB	VAL	C	164	33.829	35.319	150.588	1.00	15.74
		ATOM 4081	CG1	VAL	C	164	32.804	36.134	149.853	1.00	30.58
		ATOM 4082	CG2	VAL	C	164	33.152	34.494	151.641	1.00	20.70
10		ATOM 4083	N	SER	C	165	36.492	35.883	149.256	1.00	19.50
		ATOM 4084	CA	SER	C	165	37.384	36.742	148.479	1.00	11.01
		ATOM 4085	C	SER	C	165	37.871	36.075	147.195	1.00	7.12
		ATOM 4086	O	SER	C	165	37.991	36.725	146.166	1.00	21.85
		ATOM 4087	CB	SER	C	165	38.579	37.157	149.326	1.00	3.78
15		ATOM 4088	OG	SER	C	165	38.163	38.049	150.344	1.00	30.80
		ATOM 4089	N	TYR	C	166	38.119	34.774	147.239	1.00	9.08
		ATOM 4090	CA	TYR	C	166	38.591	34.090	146.056	1.00	6.26
		ATOM 4091	C	TYR	C	166	37.533	34.078	144.994	1.00	11.68
		ATOM 4092	O	TYR	C	166	37.840	34.237	143.819	1.00	23.71
20		ATOM 4093	CB	TYR	C	166	39.001	32.673	146.366	1.00	2.00
		ATOM 4094	CG	TYR	C	166	39.790	32.064	145.252	1.00	6.02
		ATOM 4095	CD1	TYR	C	166	41.109	32.438	145.030	1.00	2.04
		ATOM 4096	CD2	TYR	C	166	39.235	31.099	144.432	1.00	9.10
		ATOM 4097	CE1	TYR	C	166	41.844	31.861	144.023	1.00	10.73
25		ATOM 4098	CE2	TYR	C	166	39.973	30.515	143.420	1.00	12.04

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	ATOM 4099 CZ	TYR C 166	41.265	30.901	143.225	1.00	7.01
	ATOM 4100 OH	TYR C 166	41.981	30.345	142.209	1.00	10.88
	ATOM 4101 N	ARG C 167	36.284	33.871	145.392	1.00	14.68
	ATOM 4102 CA	ARG C 167	35.203	33.869	144.414	1.00	24.89
5	ATOM 4103 C	ARG C 167	35.039	35.266	143.792	1.00	23.79
	ATOM 4104 O	ARG C 167	34.971	35.409	142.572	1.00	26.41
	ATOM 4105 CB	ARG C 167	33.894	33.375	145.036	1.00	25.23
	ATOM 4106 CG	ARG C 167	33.927	31.916	145.525	1.00	67.09
	ATOM 4107 CD	ARG C 167	34.721	30.949	144.599	1.00	93.92
10	ATOM 4108 NE	ARG C 167	34.136	30.747	143.268	1.00	115.48
	ATOM 4109 CZ	ARG C 167	34.556	29.834	142.393	1.00	122.02
	ATOM 4110 NH1	ARG C 167	35.570	29.027	142.699	1.00	127.43
	ATOM 4111 NH2	ARG C 167	33.960	29.724	141.209	1.00	130.41
	ATOM 4112 N	VAL C 168	35.033	36.290	144.635	1.00	17.24
15	ATOM 4113 CA	VAL C 168	34.903	37.667	144.187	1.00	14.54
	ATOM 4114 C	VAL C 168	36.011	37.992	143.192	1.00	18.52
	ATOM 4115 O	VAL C 168	35.736	38.362	142.066	1.00	30.26
	ATOM 4116 CB	VAL C 168	34.938	38.652	145.391	1.00	13.97
	ATOM 4117 CG1	VAL C 168	35.041	40.071	144.913	1.00	17.49
20	ATOM 4118 CG2	VAL C 168	33.682	38.486	146.250	1.00	2.00
	ATOM 4119 N	LEU C 169	37.260	37.818	143.587	1.00	13.57
	ATOM 4120 CA	LEU C 169	38.355	38.102	142.693	1.00	5.20
	ATOM 4121 C	LEU C 169	38.336	37.191	141.485	1.00	11.44
	ATOM 4122 O	LEU C 169	38.494	37.669	140.379	1.00	23.90
25	ATOM 4123 CB	LEU C 169	39.690	37.986	143.408	1.00	2.00

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	ATOM 4124 CG LEU C 169 39.907 38.979 144.546 1.00 8.75
	ATOM 4125 CD1 LEU C 169 41.177 38.626 145.250 1.00 21.25
	ATOM 4126 CD2 LEU C 169 39.984 40.391 144.039 1.00 7.03
	ATOM 4127 N ARG C 170 38.079 35.901 141.655 1.00 7.36
5	ATOM 4128 CA ARG C 170 38.091 35.013 140.493 1.00 14.56
	ATOM 4129 C ARG C 170 37.142 35.521 139.426 1.00 15.14
	ATOM 4130 O ARG C 170 37.417 35.391 138.250 1.00 29.70
	ATOM 4131 CB ARG C 170 37.740 33.578 140.868 1.00 24.30
	ATOM 4132 CG ARG C 170 38.290 32.548 139.896 1.00 53.91
10	ATOM 4133 CD ARG C 170 38.016 31.136 140.385 1.00 90.51
	ATOM 4134 NE ARG C 170 38.831 30.143 139.686 1.00 122.84
	ATOM 4135 CZ ARG C 170 38.918 28.859 140.032 1.00 137.16
	ATOM 4136 NH1 ARG C 170 38.241 28.392 141.074 1.00 144.28
	ATOM 4137 NH2 ARG C 170 39.692 28.039 139.334 1.00 144.74
15	ATOM 4138 N HIS C 171 36.054 36.151 139.839 1.00 10.67
	ATOM 4139 CA HIS C 171 35.093 36.683 138.890 1.00 14.46
	ATOM 4140 C HIS C 171 35.639 37.918 138.172 1.00 25.06
	ATOM 4141 O HIS C 171 35.630 37.981 136.946 1.00 31.71
	ATOM 4142 CB HIS C 171 33.798 37.008 139.596 1.00 23.56
20	ATOM 4143 CG HIS C 171 32.865 37.864 138.802 1.00 43.58
	ATOM 4144 ND1 HIS C 171 32.065 37.362 137.796 1.00 38.36
	ATOM 4145 CD2 HIS C 171 32.533 39.171 138.935 1.00 52.44
	ATOM 4146 CE1 HIS C 171 31.267 38.320 137.358 1.00 51.39
	ATOM 4147 NE2 HIS C 171 31.530 39.427 138.033 1.00 50.86
25	ATOM 4148 N LEU C 172 36.101 38.906 138.928 1.00 24.41

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	ATOM 4149 CA	LEU C 172	36.658	40.111	138.328	1.00	8.78
	ATOM 4150 C	LEU C 172	37.702	39.771	137.254	1.00	20.81
	ATOM 4151 O	LEU C 172	37.844	40.484	136.259	1.00	35.68
	ATOM 4152 CB	LEU C 172	37.335	40.980	139.390	1.00	2.00
5	ATOM 4153 CG	LEU C 172	36.488	41.591	140.481	1.00	3.18
	ATOM 4154 CD1	LEU C 172	37.322	42.476	141.391	1.00	10.36
	ATOM 4155 CD2	LEU C 172	35.417	42.370	139.796	1.00	8.34
	ATOM 4156 N	ALA C 173	38.431	38.684	137.460	1.00	32.44
	ATOM 4157 CA	ALA C 173	39.487	38.285	136.542	1.00	50.47
10	ATOM 4158 C	ALA C 173	39.088	37.636	135.232	1.00	65.26
	ATOM 4159 O	ALA C 173	39.396	38.155	134.171	1.00	74.61
	ATOM 4160 CB	ALA C 173	40.479	37.400	137.253	1.00	45.99
	ATOM 4161 N	GLN C 174	38.551	36.419	135.319	1.00	84.21
	ATOM 4162 CA	GLN C 174	38.143	35.637	134.146	1.00	104.32
15	ATOM 4163 C	GLN C 174	39.362	35.427	133.233	1.00	122.05
	ATOM 4164 O	GLN C 174	39.430	35.998	132.141	1.00	127.98
	ATOM 4165 CB	GLN C 174	37.014	36.345	133.373	1.00	96.36
	ATOM 4166 CG	GLN C 174	35.790	36.733	134.212	1.00	89.86
	ATOM 4167 CD	GLN C 174	34.722	35.643	134.321	1.00	89.98
20	ATOM 4168 OE1	GLN C 174	33.533	35.903	134.086	1.00	91.78
	ATOM 4169 NE2	GLN C 174	35.130	34.432	134.700	1.00	87.77
	ATOM 4170 N	PRO C 175	40.349	34.631	133.692	1.00	134.56
	ATOM 4171 CA	PRO C 175	41.584	34.325	132.957	1.00	142.62
	ATOM 4172 C	PRO C 175	41.369	33.689	131.583	1.00	150.10
25	ATOM 4173 O	PRO C 175	40.382	32.939	131.414	1.00	154.64

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	ATOM 4174 CB	PRO C	175	42.310	33.365	133.900	1.00	141.25
	ATOM 4175 CG	PRO C	175	41.833	33.787	135.248	1.00	138.61
	ATOM 4176 CD	PRO C	175	40.363	33.967	135.007	1.00	136.42
	ATOM 4177 OXT	PRO C	175	42.211	33.939	130.696	1.00	157.88
5	ATOM 4178 N	GLY D	2	96.981	43.339	139.933	1.00	82.15
	ATOM 4179 CA	GLY D	2	96.454	44.481	140.747	1.00	97.17
	ATOM 4180 C	GLY D	2	95.528	43.969	141.837	1.00	100.76
	ATOM 4181 O	GLY D	2	95.135	42.803	141.776	1.00	107.47
	ATOM 4182 N	TYR D	3	95.157	44.826	142.796	1.00	102.10
10	ATOM 4183 CA	TYR D	3	94.280	44.436	143.914	1.00	103.35
	ATOM 4184 C	TYR D	3	92.938	45.174	144.132	1.00	100.71
	ATOM 4185 O	TYR D	3	92.208	44.855	145.078	1.00	90.66
	ATOM 4186 CB	TYR D	3	95.060	44.476	145.229	1.00	108.85
	ATOM 4187 CG	TYR D	3	96.448	43.903	145.145	1.00	117.00
15	ATOM 4188 CD1	TYR D	3	96.650	42.534	145.009	1.00	120.70
	ATOM 4189 CD2	TYR D	3	97.565	44.736	145.185	1.00	126.16
	ATOM 4190 CE1	TYR D	3	97.932	42.004	144.912	1.00	130.48
	ATOM 4191 CE2	TYR D	3	98.851	44.221	145.090	1.00	134.38
	ATOM 4192 CZ	TYR D	3	99.029	42.852	144.952	1.00	136.14
20	ATOM 4193 OH	TYR D	3	100.301	42.336	144.841	1.00	144.16
	ATOM 4194 N	PRO D	4	92.615	46.196	143.314	1.00	104.80
	ATOM 4195 CA	PRO D	4	91.323	46.836	143.588	1.00	105.20
	ATOM 4196 C	PRO D	4	90.197	45.877	143.207	1.00	98.29
	ATOM 4197 O	PRO D	4	90.221	45.288	142.111	1.00	103.33
25	ATOM 4198 CB	PRO D	4	91.327	48.050	142.645	1.00	113.40

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		ATOM 4199	CG	PRO	D	4	92.785	48.299	142.374	1.00	117.51
		ATOM 4200	CD	PRO	D	4	93.321	46.902	142.231	1.00	111.45
		ATOM 4201	N	PRO	D	5	89.229	45.658	144.117	1.00	84.09
		ATOM 4202	CA	PRO	D	5	88.123	44.752	143.798	1.00	73.61
5		ATOM 4203	C	PRO	D	5	87.333	45.337	142.629	1.00	74.67
		ATOM 4204	O	PRO	D	5	87.091	46.550	142.580	1.00	81.08
		ATOM 4205	CB	PRO	D	5	87.318	44.740	145.093	1.00	65.04
		ATOM 4206	CG	PRO	D	5	87.571	46.097	145.657	1.00	66.36
		ATOM 4207	CD	PRO	D	5	89.047	46.256	145.449	1.00	73.81
10		ATOM 4208	N	ALA	D	6	87.010	44.490	141.653	1.00	72.03
		ATOM 4209	CA	ALA	D	6	86.269	44.928	140.471	1.00	73.18
		ATOM 4210	C	ALA	D	6	84.773	44.658	140.626	1.00	74.05
		ATOM 4211	O	ALA	D	6	84.370	43.840	141.449	1.00	76.59
		ATOM 4212	CB	ALA	D	6	86.807	44.246	139.228	1.00	76.22
15		ATOM 4213	N	SER	D	7	83.958	45.380	139.863	1.00	75.07
		ATOM 4214	CA	SER	D	7	82.500	45.243	139.901	1.00	67.72
		ATOM 4215	C	SER	D	7	82.020	43.806	139.556	1.00	69.24
		ATOM 4216	O	SER	D	7	82.233	43.340	138.430	1.00	80.98
		ATOM 4217	CB	SER	D	7	81.884	46.295	138.949	1.00	62.67
20		ATOM 4218	OG	SER	D	7	82.833	46.783	137.993	1.00	56.50
		ATOM 4219	N	PRO	D	8	81.410	43.076	140.531	1.00	61.26
		ATOM 4220	CA	PRO	D	8	80.904	41.700	140.345	1.00	53.14
		ATOM 4221	C	PRO	D	8	79.788	41.603	139.292	1.00	52.74
		ATOM 4222	O	PRO	D	8	79.108	42.599	139.010	1.00	55.41
25		ATOM 4223	CB	PRO	D	8	80.390	41.332	141.736	1.00	40.53

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	ATOM 4224 CG	PRO D	8	81.244	42.128	142.641	1.00	52.21
	ATOM 4225 CD	PRO D	8	81.262	43.474	141.941	1.00	58.94
	ATOM 4226 N	SER D	9	79.561	40.400	138.755	1.00	47.65
	ATOM 4227 CA	SER D	9	78.556	40.208	137.700	1.00	48.86
5	ATOM 4228 C	SER D	9	77.693	38.935	137.792	1.00	43.51
	ATOM 4229 O	SER D	9	77.814	38.155	138.737	1.00	35.19
	ATOM 4230 CB	SER D	9	79.237	40.278	136.315	1.00	56.99
	ATOM 4231 OG	SER D	9	80.239	39.272	136.158	1.00	64.94
	ATOM 4232 N	ASN D	10	76.853	38.737	136.773	1.00	45.63
10	ATOM 4233 CA	ASN D	10	75.938	37.603	136.663	1.00	49.28
	ATOM 4234 C	ASN D	10	75.265	37.322	138.006	1.00	50.54
	ATOM 4235 O	ASN D	10	75.288	36.197	138.516	1.00	56.19
	ATOM 4236 CB	ASN D	10	76.639	36.351	136.101	1.00	53.45
	ATOM 4237 CG	ASN D	10	75.686	35.441	135.303	1.00	67.38
15	ATOM 4238 OD1	ASN D	10	74.521	35.795	135.059	1.00	59.06
	ATOM 4239 ND2	ASN D	10	76.223	34.307	134.843	1.00	80.65
	ATOM 4240 N	LEU D	11	74.724	38.384	138.601	1.00	49.27
	ATOM 4241 CA	LEU D	11	74.000	38.298	139.875	1.00	41.84
	ATOM 4242 C	LEU D	11	72.576	37.801	139.596	1.00	44.42
20	ATOM 4243 O	LEU D	11	71.851	38.369	138.755	1.00	45.20
	ATOM 4244 CB	LEU D	11	73.919	39.671	140.556	1.00	45.16
	ATOM 4245 CG	LEU D	11	72.945	39.851	141.734	1.00	31.04
	ATOM 4246 CD1	LEU D	11	73.505	39.235	143.003	1.00	24.46
	ATOM 4247 CD2	LEU D	11	72.655	41.328	141.941	1.00	33.24
25	ATOM 4248 N	SER D	12	72.195	36.728	140.283	1.00	40.39

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	ATOM 4249 CA	SER D	12	70.873	36.144	140.133	1.00	31.59
	ATOM 4250 C	SER D	12	70.338	35.801	141.506	1.00	30.27
	ATOM 4251 O	SER D	12	71.093	35.574	142.464	1.00	29.95
	ATOM 4252 CB	SER D	12	70.915	34.874	139.266	1.00	36.01
5	ATOM 4253 OG	SER D	12	71.379	33.731	139.977	1.00	43.00
	ATOM 4254 N	CYS D	13	69.024	35.741	141.593	1.00	24.99
	ATOM 4255 CA	CYS D	13	68.390	35.420	142.838	1.00	19.01
	ATOM 4256 C	CYS D	13	67.232	34.504	142.524	1.00	20.00
	ATOM 4257 O	CYS D	13	66.591	34.642	141.485	1.00	21.63
10	ATOM 4258 CB	CYS D	13	67.873	36.697	143.502	1.00	17.20
	ATOM 4259 SG	CYS D	13	69.140	37.881	144.028	1.00	28.14
	ATOM 4260 N	LEU D	14	67.004	33.539	143.401	1.00	17.77
	ATOM 4261 CA	LEU D	14	65.894	32.629	143.268	1.00	11.72
	ATOM 4262 C	LEU D	14	65.227	32.522	144.640	1.00	17.56
15	ATOM 4263 O	LEU D	14	65.918	32.422	145.661	1.00	20.11
	ATOM 4264 CB	LEU D	14	66.379	31.261	142.819	1.00	13.00
	ATOM 4265 CG	LEU D	14	66.731	31.113	141.356	1.00	10.62
	ATOM 4266 CD1	LEU D	14	67.157	29.706	141.137	1.00	30.96
	ATOM 4267 CD2	LEU D	14	65.541	31.421	140.494	1.00	22.97
20	ATOM 4268 N	MET D	15	63.897	32.558	144.664	1.00	11.18
	ATOM 4269 CA	MET D	15	63.127	32.452	145.897	1.00	10.44
	ATOM 4270 C	MET D	15	62.929	30.982	146.202	1.00	9.16
	ATOM 4271 O	MET D	15	62.295	30.275	145.436	1.00	23.55
	ATOM 4272 CB	MET D	15	61.780	33.124	145.708	1.00	2.00
25	ATOM 4273 CG	MET D	15	60.912	33.065	146.898	1.00	2.00

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		ATOM 4274	SD	MET	D	15	61.539	34.048	148.184	1.00	20.62
		ATOM 4275	CE	MET	D	15	60.693	33.396	149.567	1.00	9.26
		ATOM 4276	N	HIS	D	16	63.498	30.512	147.301	1.00	10.20
		ATOM 4277	CA	HIS	D	16	63.406	29.106	147.674	1.00	7.15
5		ATOM 4278	C	HIS	D	16	62.266	28.883	148.620	1.00	14.48
		ATOM 4279	O	HIS	D	16	62.307	29.335	149.763	1.00	15.29
		ATOM 4280	CB	HIS	D	16	64.703	28.664	148.329	1.00	7.51
		ATOM 4281	CG	HIS	D	16	65.770	28.285	147.353	1.00	13.51
		ATOM 4282	ND1	HIS	D	16	66.435	29.209	146.577	1.00	21.72
10		ATOM 4283	CD2	HIS	D	16	66.271	27.077	147.009	1.00	20.42
		ATOM 4284	CE1	HIS	D	16	67.297	28.590	145.794	1.00	28.03
		ATOM 4285	NE2	HIS	D	16	67.217	27.295	146.037	1.00	36.41
		ATOM 4286	N	LEU	D	17	61.253	28.173	148.153	1.00	12.41
		ATOM 4287	CA	LEU	D	17	60.089	27.917	148.975	1.00	11.95
15		ATOM 4288	C	LEU	D	17	60.320	26.912	150.105	1.00	16.82
		ATOM 4289	O	LEU	D	17	59.533	26.856	151.055	1.00	28.01
		ATOM 4290	CB	LEU	D	17	58.950	27.438	148.093	1.00	12.28
		ATOM 4291	CG	LEU	D	17	58.373	28.444	147.113	1.00	2.00
		ATOM 4292	CD1	LEU	D	17	57.196	27.829	146.417	1.00	7.11
20		ATOM 4293	CD2	LEU	D	17	57.925	29.675	147.851	1.00	5.69
		ATOM 4294	N	THR	D	18	61.369	26.103	149.978	1.00	9.15
		ATOM 4295	CA	THR	D	18	61.708	25.089	150.977	1.00	17.83
		ATOM 4296	C	THR	D	18	62.279	25.729	152.229	1.00	14.90
		ATOM 4297	O	THR	D	18	61.911	25.382	153.340	1.00	30.91
25		ATOM 4298	CB	THR	D	18	62.740	24.098	150.421	1.00	20.11

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	ATOM	4299	OG1	THR	D	18	63.777	24.819	149.741	1.00	35.81
	ATOM	4300	CG2	THR	D	18	62.086	23.164	149.425	1.00	27.77
	ATOM	4301	N	THR	D	19	63.160	26.695	152.027	1.00	15.92
	ATOM	4302	CA	THR	D	19	63.806	27.424	153.112	1.00	21.44
5	ATOM	4303	C	THR	D	19	63.186	28.810	153.321	1.00	25.58
	ATOM	4304	O	THR	D	19	63.567	29.537	154.235	1.00	41.01
	ATOM	4305	CB	THR	D	19	65.293	27.603	152.801	1.00	31.78
	ATOM	4306	OG1	THR	D	19	65.440	28.436	151.648	1.00	41.47
	ATOM	4307	CG2	THR	D	19	65.926	26.260	152.484	1.00	36.13
10	ATOM	4308	N	ASN	D	20	62.244	29.162	152.447	1.00	28.83
	ATOM	4309	CA	ASN	D	20	61.538	30.436	152.458	1.00	16.82
	ATOM	4310	C	ASN	D	20	62.538	31.572	152.567	1.00	18.66
	ATOM	4311	O	ASN	D	20	62.518	32.357	153.512	1.00	27.69
	ATOM	4312	CB	ASN	D	20	60.503	30.474	153.579	1.00	9.84
15	ATOM	4313	CG	ASN	D	20	59.217	31.233	153.191	1.00	21.21
	ATOM	4314	OD1	ASN	D	20	58.497	31.711	154.059	1.00	26.91
	ATOM	4315	ND2	ASN	D	20	58.903	31.298	151.903	1.00	34.60
	ATOM	4316	N	SER	D	21	63.447	31.626	151.603	1.00	15.64
	ATOM	4317	CA	SER	D	21	64.459	32.667	151.575	1.00	12.88
20	ATOM	4318	C	SER	D	21	64.913	32.951	150.156	1.00	9.16
	ATOM	4319	O	SER	D	21	64.899	32.071	149.314	1.00	22.74
	ATOM	4320	CB	SER	D	21	65.655	32.274	152.435	1.00	6.53
	ATOM	4321	OG	SER	D	21	66.090	30.960	152.157	1.00	23.60
	ATOM	4322	N	LEU	D	22	65.228	34.208	149.885	1.00	13.59
25	ATOM	4323	CA	LEU	D	22	65.702	34.661	148.583	1.00	4.09

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	ATOM 4324 C	LEU D	22	67.197	34.440	148.550	1.00	8.06
	ATOM 4325 O	LEU D	22	67.938	35.041	149.311	1.00	13.39
	ATOM 4326 CB	LEU D	22	65.442	36.140	148.449	1.00	2.00
	ATOM 4327 CG	LEU D	22	65.808	36.722	147.114	1.00	2.00
5	ATOM 4328 CD1	LEU D	22	64.833	36.237	146.098	1.00	2.00
	ATOM 4329 CD2	LEU D	22	65.696	38.190	147.216	1.00	9.96
	ATOM 4330 N	VAL D	23	67.632	33.562	147.672	1.00	16.99
	ATOM 4331 CA	VAL D	23	69.033	33.229	147.561	1.00	12.17
	ATOM 4332 C	VAL D	23	69.680	33.846	146.353	1.00	14.56
10	ATOM 4333 O	VAL D	23	69.298	33.574	145.218	1.00	12.30
	ATOM 4334 CB	VAL D	23	69.191	31.735	147.513	1.00	7.06
	ATOM 4335 CG1	VAL D	23	70.606	31.373	147.185	1.00	14.16
	ATOM 4336 CG2	VAL D	23	68.777	31.165	148.858	1.00	19.27
	ATOM 4337 N	CYS D	24	70.719	34.620	146.614	1.00	19.74
15	ATOM 4338 CA	CYS D	24	71.438	35.314	145.572	1.00	24.40
	ATOM 4339 C	CYS D	24	72.876	34.874	145.461	1.00	25.93
	ATOM 4340 O	CYS D	24	73.556	34.666	146.465	1.00	28.81
	ATOM 4341 CB	CYS D	24	71.344	36.798	145.835	1.00	26.99
	ATOM 4342 SG	CYS D	24	69.605	37.284	145.927	1.00	35.73
20	ATOM 4343 N	GLN D	25	73.322	34.699	144.226	1.00	29.65
	ATOM 4344 CA	GLN D	25	74.680	34.265	143.945	1.00	33.10
	ATOM 4345 C	GLN D	25	75.259	35.198	142.888	1.00	35.86
	ATOM 4346 O	GLN D	25	74.506	35.713	142.060	1.00	34.46
	ATOM 4347 CB	GLN D	25	74.657	32.825	143.455	1.00	26.37
25	ATOM 4348 CG	GLN D	25	73.646	32.549	142.367	1.00	44.56

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		ATOM	4349	CD	GLN	D	25	73.653	31.098	141.955	1.00	60.94
		ATOM	4350	OE1	GLN	D	25	74.229	30.730	140.925	1.00	77.04
		ATOM	4351	NE2	GLN	D	25	73.033	30.255	142.770	1.00	68.83
		ATOM	4352	N	TRP	D	26	76.580	35.401	142.905	1.00	35.81
5		ATOM	4353	CA	TRP	D	26	77.260	36.315	141.969	1.00	35.42
		ATOM	4354	C	TRP	D	26	78.621	35.784	141.532	1.00	43.96
		ATOM	4355	O	TRP	D	26	79.059	34.743	142.025	1.00	49.90
		ATOM	4356	CB	TRP	D	26	77.495	37.662	142.663	1.00	22.12
		ATOM	4357	CG	TRP	D	26	78.231	37.513	143.964	1.00	33.76
10		ATOM	4358	CD1	TRP	D	26	79.589	37.376	144.148	1.00	31.59
		ATOM	4359	CD2	TRP	D	26	77.643	37.388	145.259	1.00	45.86
		ATOM	4360	NE1	TRP	D	26	79.872	37.161	145.480	1.00	32.32
		ATOM	4361	CE2	TRP	D	26	78.694	37.167	146.183	1.00	40.40
		ATOM	4362	CE3	TRP	D	26	76.325	37.432	145.732	1.00	45.98
15		ATOM	4363	CZ2	TRP	D	26	78.463	36.995	147.544	1.00	33.73
		ATOM	4364	CZ3	TRP	D	26	76.099	37.259	147.085	1.00	45.71
		ATOM	4365	CH2	TRP	D	26	77.164	37.044	147.976	1.00	28.58
		ATOM	4366	N	GLU	D	27	79.296	36.537	140.653	1.00	53.35
		ATOM	4367	CA	GLU	D	27	80.645	36.214	140.158	1.00	61.02
20		ATOM	4368	C	GLU	D	27	81.634	37.305	140.601	1.00	54.39
		ATOM	4369	O	GLU	D	27	81.552	38.450	140.141	1.00	59.22
		ATOM	4370	CB	GLU	D	27	80.650	36.102	138.623	1.00	89.58
		ATOM	4371	CG	GLU	D	27	82.042	35.930	137.967	1.00	125.09
		ATOM	4372	CD	GLU	D	27	82.792	34.667	138.404	1.00	143.57
25		ATOM	4373	OE1	GLU	D	27	82.260	33.547	138.233	1.00	155.39

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		ATOM 4374	OE2	GLU	D	27	83.933	34.796	138.900	1.00	156.78
		ATOM 4375	N	PRO	D	28	82.558	36.972	141.523	1.00	46.15
		ATOM 4376	CA	PRO	D	28	83.552	37.929	142.020	1.00	53.05
		ATOM 4377	C	PRO	D	28	84.635	38.264	140.994	1.00	62.54
5		ATOM 4378	O	PRO	D	28	85.000	39.424	140.817	1.00	69.87
		ATOM 4379	CB	PRO	D	28	84.130	37.216	143.246	1.00	48.18
		ATOM 4380	CG	PRO	D	28	84.006	35.770	142.907	1.00	32.34
		ATOM 4381	CD	PRO	D	28	82.647	35.695	142.255	1.00	44.10
		ATOM 4382	N	GLY	D	29	85.136	37.240	140.315	1.00	72.79
10		ATOM 4383	CA	GLY	D	29	86.167	37.439	139.316	1.00	82.72
		ATOM 4384	C	GLY	D	29	87.565	37.232	139.871	1.00	87.81
		ATOM 4385	O	GLY	D	29	87.803	36.296	140.638	1.00	89.19
		ATOM 4386	N	PRO	D	30	88.517	38.091	139.478	1.00	89.58
		ATOM 4387	CA	PRO	D	30	89.917	38.056	139.899	1.00	93.60
15		ATOM 4388	C	PRO	D	30	90.144	37.699	141.365	1.00	101.71
		ATOM 4389	O	PRO	D	30	89.643	38.367	142.268	1.00	105.62
		ATOM 4390	CB	PRO	D	30	90.383	39.467	139.574	1.00	94.62
		ATOM 4391	CG	PRO	D	30	89.671	39.727	138.276	1.00	91.61
		ATOM 4392	CD	PRO	D	30	88.279	39.213	138.547	1.00	88.19
20		ATOM 4393	N	GLU	D	31	90.895	36.626	141.583	1.00	112.20
		ATOM 4394	CA	GLU	D	31	91.218	36.158	142.923	1.00	126.47
		ATOM 4395	C	GLU	D	31	92.255	37.097	143.537	1.00	126.08
		ATOM 4396	O	GLU	D	31	93.452	36.973	143.270	1.00	132.15
		ATOM 4397	CB	GLU	D	31	91.751	34.714	142.849	1.00	140.87
25		ATOM 4398	CG	GLU	D	31	92.489	34.188	144.094	1.00	161.90

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		ATOM 4399	CD	GLU	D	31	91.605	34.030	145.320	1.00	172.26
		ATOM 4400	OE1	GLU	D	31	90.411	33.688	145.167	1.00	180.61
		ATOM 4401	OE2	GLU	D	31	92.116	34.232	146.443	1.00	177.72
		ATOM 4402	N	THR	D	32	91.789	38.092	144.284	1.00	125.03
5		ATOM 4403	CA	THR	D	32	92.697	39.027	144.933	1.00	124.30
		ATOM 4404	C	THR	D	32	93.413	38.267	146.051	1.00	136.15
		ATOM 4405	O	THR	D	32	92.912	37.256	146.542	1.00	137.17
		ATOM 4406	CB	THR	D	32	91.939	40.235	145.516	1.00	112.69
		ATOM 4407	OG1	THR	D	32	91.115	40.821	144.503	1.00	97.57
10		ATOM 4408	CG2	THR	D	32	92.910	41.282	146.001	1.00	107.83
		ATOM 4409	N	HIS	D	33	94.586	38.748	146.446	1.00	149.21
		ATOM 4410	CA	HIS	D	33	95.375	38.103	147.494	1.00	165.54
		ATOM 4411	C	HIS	D	33	95.215	38.817	148.851	1.00	160.13
		ATOM 4412	O	HIS	D	33	96.024	38.618	149.759	1.00	164.15
15		ATOM 4413	CB	HIS	D	33	96.850	38.076	147.042	1.00	192.54
		ATOM 4414	CG	HIS	D	33	97.784	37.366	147.978	1.00	219.73
		ATOM 4415	ND1	HIS	D	33	97.367	36.410	148.880	1.00	232.37
		ATOM 4416	CD2	HIS	D	33	99.125	37.477	148.145	1.00	230.09
		ATOM 4417	CE1	HIS	D	33	98.407	35.964	149.562	1.00	240.11
20		ATOM 4418	NE2	HIS	D	33	99.486	36.596	149.135	1.00	238.68
		ATOM 4419	N	LEU	D	34	94.132	39.579	149.013	1.00	150.18
		ATOM 4420	CA	LEU	D	34	93.890	40.341	150.246	1.00	138.80
		ATOM 4421	C	LEU	D	34	92.524	40.101	150.900	1.00	132.44
		ATOM 4422	O	LEU	D	34	91.549	39.794	150.214	1.00	131.14
25		ATOM 4423	CB	LEU	D	34	94.032	41.836	149.950	1.00	136.17

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		ATOM 4424	CG	LEU	D	34	95.365	42.302	149.362	1.00	135.96
		ATOM 4425	CD1	LEU	D	34	95.238	43.721	148.831	1.00	132.62
		ATOM 4426	CD2	LEU	D	34	96.461	42.202	150.420	1.00	139.12
		ATOM 4427	N	PRO	D	35	92.436	40.267	152.237	1.00	127.98
5		ATOM 4428	CA	PRO	D	35	91.208	40.083	153.029	1.00	123.05
		ATOM 4429	C	PRO	D	35	90.014	40.931	152.552	1.00	115.34
		ATOM 4430	O	PRO	D	35	89.803	42.064	153.009	1.00	117.47
		ATOM 4431	CB	PRO	D	35	91.654	40.476	154.440	1.00	125.95
		ATOM 4432	CG	PRO	D	35	93.081	40.032	154.466	1.00	128.93
10		ATOM 4433	CD	PRO	D	35	93.584	40.529	153.126	1.00	130.06
		ATOM 4434	N	THR	D	36	89.229	40.351	151.649	1.00	99.59
		ATOM 4435	CA	THR	D	36	88.065	41.010	151.080	1.00	84.45
		ATOM 4436	C	THR	D	36	86.774	40.477	151.713	1.00	75.88
		ATOM 4437	O	THR	D	36	86.796	39.508	152.478	1.00	79.84
15		ATOM 4438	CB	THR	D	36	88.041	40.811	149.548	1.00	81.28
		ATOM 4439	OG1	THR	D	36	87.018	41.622	148.961	1.00	78.14
		ATOM 4440	CG2	THR	D	36	87.795	39.357	149.207	1.00	79.00
		ATOM 4441	N	SER	D	37	85.652	41.098	151.370	1.00	58.92
		ATOM 4442	CA	SER	D	37	84.357	40.713	151.912	1.00	50.67
20		ATOM 4443	C	SER	D	37	83.217	41.139	150.986	1.00	52.67
		ATOM 4444	O	SER	D	37	83.260	42.219	150.397	1.00	64.53
		ATOM 4445	CB	SER	D	37	84.155	41.369	153.278	1.00	50.87
		ATOM 4446	OG	SER	D	37	83.853	42.748	153.141	1.00	49.17
		ATOM 4447	N	PHE	D	38	82.183	40.308	150.891	1.00	47.61
25		ATOM 4448	CA	PHE	D	38	81.031	40.598	150.041	1.00	36.73

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	ATOM 4449 C	PHE D	38	79.774	40.758	150.890	1.00	38.51
	ATOM 4450 O	PHE D	38	79.484	39.931	151.753	1.00	41.92
	ATOM 4451 CB	PHE D	38	80.801	39.458	149.057	1.00	41.13
	ATOM 4452 CG	PHE D	38	81.973	39.164	148.155	1.00	46.26
5	ATOM 4453 CD1	PHE D	38	82.969	38.266	148.546	1.00	45.18
	ATOM 4454 CD2	PHE D	38	82.057	39.750	146.892	1.00	42.59
	ATOM 4455 CE1	PHE D	38	84.028	37.958	147.692	1.00	37.88
	ATOM 4456 CE2	PHE D	38	83.109	39.447	146.035	1.00	37.76
	ATOM 4457 CZ	PHE D	38	84.098	38.548	146.438	1.00	35.25
10	ATOM 4458 N	ILE D	39	79.017	41.814	150.641	1.00	38.08
	ATOM 4459 CA	ILE D	39	77.800	42.053	151.391	1.00	40.08
	ATOM 4460 C	ILE D	39	76.638	42.268	150.437	1.00	47.40
	ATOM 4461 O	ILE D	39	76.669	43.179	149.597	1.00	53.45
	ATOM 4462 CB	ILE D	39	77.929	43.286	152.291	1.00	39.48
15	ATOM 4463 CG1	ILE D	39	78.951	43.031	153.396	1.00	49.55
	ATOM 4464 CG2	ILE D	39	76.583	43.634	152.892	1.00	46.50
	ATOM 4465 CD1	ILE D	39	79.141	44.214	154.342	1.00	64.07
	ATOM 4466 N	LEU D	40	75.637	41.400	150.539	1.00	42.45
	ATOM 4467 CA	LEU D	40	74.452	41.500	149.706	1.00	35.81
20	ATOM 4468 C	LEU D	40	73.609	42.583	150.357	1.00	34.43
	ATOM 4469 O	LEU D	40	73.142	42.427	151.492	1.00	36.92
	ATOM 4470 CB	LEU D	40	73.715	40.162	149.692	1.00	36.05
	ATOM 4471 CG	LEU D	40	72.474	40.062	148.815	1.00	29.88
	ATOM 4472 CD1	LEU D	40	72.817	40.439	147.409	1.00	33.71
25	ATOM 4473 CD2	LEU D	40	71.936	38.647	148.864	1.00	45.89

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		ATOM 4474 N	LYS D	41	73.499	43.711	149.676	1.00	27.92
		ATOM 4475 CA	LYS D	41	72.742	44.819	150.206	1.00	33.10
		ATOM 4476 C	LYS D	41	71.446	44.958	149.455	1.00	25.60
		ATOM 4477 O	LYS D	41	71.364	44.623	148.276	1.00	16.95
5		ATOM 4478 CB	LYS D	41	73.544	46.118	150.096	1.00	43.20
		ATOM 4479 CG	LYS D	41	74.729	46.250	151.057	1.00	51.10
		ATOM 4480 CD	LYS D	41	74.841	47.707	151.536	1.00	68.95
		ATOM 4481 CE	LYS D	41	75.966	47.938	152.548	1.00	79.09
		ATOM 4482 NZ	LYS D	41	75.936	49.317	153.144	1.00	82.78
10		ATOM 4483 N	SER D	42	70.446	45.512	150.122	1.00	28.62
		ATOM 4484 CA	SER D	42	69.152	45.695	149.492	1.00	24.91
		ATOM 4485 C	SER D	42	68.231	46.649	150.257	1.00	28.21
		ATOM 4486 O	SER D	42	68.477	46.974	151.424	1.00	36.60
		ATOM 4487 CB	SER D	42	68.488	44.334	149.355	1.00	16.70
15		ATOM 4488 OG	SER D	42	68.653	43.607	150.563	1.00	23.66
		ATOM 4489 N	PHE D	43	67.205	47.137	149.565	1.00	25.33
		ATOM 4490 CA	PHE D	43	66.204	48.019	150.143	1.00	24.38
		ATOM 4491 C	PHE D	43	64.852	47.825	149.434	1.00	29.94
		ATOM 4492 O	PHE D	43	64.796	47.551	148.226	1.00	30.75
20		ATOM 4493 CB	PHE D	43	66.663	49.490	150.112	1.00	28.97
		ATOM 4494 CG	PHE D	43	66.810	50.094	148.720	1.00	28.67
		ATOM 4495 CD1	PHE D	43	65.687	50.461	147.956	1.00	33.93
		ATOM 4496 CD2	PHE D	43	68.075	50.364	148.199	1.00	17.47
		ATOM 4497 CE1	PHE D	43	65.826	51.093	146.689	1.00	19.38
25		ATOM 4498 CE2	PHE D	43	68.221	50.989	146.943	1.00	12.55

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5	ATOM 4499	CZ	PHE	D	43	67.087	51.353	146.191	1.00	8.58
	ATOM 4500	N	ARG	D	44	63.768	47.874	150.198	1.00	26.86
	ATOM 4501	CA	ARG	D	44	62.450	47.725	149.609	1.00	37.34
	ATOM 4502	C	ARG	D	44	62.226	48.932	148.702	1.00	33.44
	ATOM 4503	O	ARG	D	44	62.711	50.014	148.983	1.00	38.04
10	ATOM 4504	CB	ARG	D	44	61.379	47.598	150.696	1.00	43.15
	ATOM 4505	CG	ARG	D	44	61.595	46.376	151.604	1.00	62.87
	ATOM 4506	CD	ARG	D	44	60.444	46.129	152.571	1.00	72.73
	ATOM 4507	NE	ARG	D	44	60.844	45.224	153.643	1.00	86.88
	ATOM 4508	CZ	ARG	D	44	60.097	44.941	154.705	1.00	99.90
15	ATOM 4509	NH1	ARG	D	44	58.895	45.485	154.842	1.00	104.07
	ATOM 4510	NH2	ARG	D	44	60.570	44.143	155.654	1.00	114.74
	ATOM 4511	N	SER	D	45	61.516	48.744	147.604	1.00	26.82
	ATOM 4512	CA	SER	D	45	61.308	49.826	146.663	1.00	21.56
	ATOM 4513	C	SER	D	45	59.950	49.610	146.001	1.00	23.09
20	ATOM 4514	O	SER	D	45	59.080	49.013	146.628	1.00	34.17
	ATOM 4515	CB	SER	D	45	62.440	49.782	145.642	1.00	27.67
	ATOM 4516	OG	SER	D	45	62.328	50.822	144.704	1.00	27.80
	ATOM 4517	N	ARG	D	46	59.730	50.152	144.800	1.00	8.38
	ATOM 4518	CA	ARG	D	46	58.464	49.956	144.073	1.00	28.52
25	ATOM 4519	C	ARG	D	46	58.907	49.592	142.677	1.00	31.78
	ATOM 4520	O	ARG	D	46	60.112	49.564	142.437	1.00	35.79
	ATOM 4521	CB	ARG	D	46	57.567	51.201	144.059	1.00	38.82
	ATOM 4522	CG	ARG	D	46	56.885	51.510	145.402	1.00	56.21
	ATOM 4523	CD	ARG	D	46	55.357	51.266	145.406	1.00	61.72

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	ATOM 4524 NE ARG D 46 54.673 52.138 146.376 1.00 88.87
	ATOM 4525 CZ ARG D 46 54.512 53.467 146.239 1.00 107.24
	ATOM 4526 NH1 ARG D 46 54.973 54.114 145.165 1.00 120.41
	ATOM 4527 NH2 ARG D 46 53.918 54.173 147.200 1.00 106.36
5	ATOM 4528 N ALA D 47 57.978 49.275 141.767 1.00 38.45
	ATOM 4529 CA ALA D 47 58.371 48.879 140.400 1.00 37.98
	ATOM 4530 C ALA D 47 59.372 49.858 139.790 1.00 39.72
	ATOM 4531 O ALA D 47 59.383 51.049 140.130 1.00 47.76
	ATOM 4532 CB ALA D 47 57.144 48.693 139.490 1.00 27.74
10	ATOM 4533 N ASP D 48 60.271 49.323 138.969 1.00 51.32
	ATOM 4534 CA ASP D 48 61.319 50.110 138.306 1.00 60.65
	ATOM 4535 C ASP D 48 62.422 50.553 139.286 1.00 59.36
	ATOM 4536 O ASP D 48 63.413 51.154 138.884 1.00 66.16
	ATOM 4537 CB ASP D 48 60.722 51.314 137.552 1.00 71.43
15	ATOM 4538 CG ASP D 48 59.652 50.909 136.518 1.00 88.57
	ATOM 4539 OD1 ASP D 48 59.447 49.694 136.269 1.00 100.24
	ATOM 4540 OD2 ASP D 48 59.004 51.820 135.953 1.00 97.72
	ATOM 4541 N CYS D 49 62.258 50.197 140.559 1.00 57.15
	ATOM 4542 CA CYS D 49 63.203 50.508 141.637 1.00 57.07
20	ATOM 4543 C CYS D 49 63.684 51.970 141.814 1.00 62.68
	ATOM 4544 O CYS D 49 64.827 52.231 142.209 1.00 59.28
	ATOM 4545 CB CYS D 49 64.363 49.491 141.653 1.00 52.83
	ATOM 4546 SG CYS D 49 63.903 47.789 142.185 1.00 49.51
	ATOM 4547 N GLN D 50 62.766 52.914 141.598 1.00 71.14
25	ATOM 4548 CA GLN D 50 63.038 54.341 141.770 1.00 77.52

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	ATOM 4549 C	GLN D	50	62.104	54.800	142.889	1.00	76.55
	ATOM 4550 O	GLN D	50	60.922	55.096	142.669	1.00	81.30
	ATOM 4551 CB	GLN D	50	62.785	55.102	140.465	1.00	92.41
	ATOM 4552 CG	GLN D	50	63.861	54.855	139.404	1.00	111.42
5	ATOM 4553 CD	GLN D	50	63.497	55.392	138.030	1.00	121.51
	ATOM 4554 OE1	GLN D	50	62.400	55.908	137.817	1.00	130.38
	ATOM 4555 NE2	GLN D	50	64.419	55.261	137.085	1.00	127.48
	ATOM 4556 N	TYR D	51	62.648	54.752	144.101	1.00	67.69
	ATOM 4557 CA	TYR D	51	61.963	55.095	145.347	1.00	60.01
10	ATOM 4558 C	TYR D	51	62.877	54.360	146.286	1.00	46.73
	ATOM 4559 O	TYR D	51	62.808	53.150	146.369	1.00	44.55
	ATOM 4560 CB	TYR D	51	60.561	54.452	145.400	1.00	71.40
	ATOM 4561 CG	TYR D	51	59.870	54.479	146.758	1.00	93.02
	ATOM 4562 CD1	TYR D	51	58.699	55.207	146.953	1.00	102.34
15	ATOM 4563 CD2	TYR D	51	60.363	53.739	147.833	1.00	100.00
	ATOM 4564 CE1	TYR D	51	58.034	55.192	148.187	1.00	111.18
	ATOM 4565 CE2	TYR D	51	59.711	53.717	149.063	1.00	109.57
	ATOM 4566 CZ	TYR D	51	58.548	54.441	149.237	1.00	114.70
	ATOM 4567 OH	TYR D	51	57.904	54.396	150.456	1.00	119.88
20	ATOM 4568 N	GLN D	52	63.818	55.046	146.901	1.00	46.02
	ATOM 4569 CA	GLN D	52	64.711	54.334	147.789	1.00	53.75
	ATOM 4570 C	GLN D	52	63.975	54.136	149.107	1.00	54.44
	ATOM 4571 O	GLN D	52	63.888	55.056	149.916	1.00	61.38
	ATOM 4572 CB	GLN D	52	66.039	55.088	147.955	1.00	61.61
25	ATOM 4573 CG	GLN D	52	67.134	54.283	148.652	1.00	74.39

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		ATOM 4574	CD	GLN	D	52	68.543	54.804	148.371	1.00	86.78
		ATOM 4575	OE1	GLN	D	52	68.814	55.371	147.308	1.00	91.58
		ATOM 4576	NE2	GLN	D	52	69.455	54.579	149.314	1.00	91.51
		ATOM 4577	N	GLY	D	53	63.368	52.957	149.256	1.00	55.53
5		ATOM 4578	CA	GLY	D	53	62.612	52.592	150.454	1.00	42.48
		ATOM 4579	C	GLY	D	53	63.388	52.041	151.648	1.00	40.15
		ATOM 4580	O	GLY	D	53	64.605	52.232	151.772	1.00	45.95
		ATOM 4581	N	ASP	D	54	62.701	51.310	152.520	1.00	37.57
		ATOM 4582	CA	ASP	D	54	63.353	50.792	153.719	1.00	44.17
10		ATOM 4583	C	ASP	D	54	64.527	49.851	153.465	1.00	35.20
		ATOM 4584	O	ASP	D	54	64.432	48.917	152.692	1.00	46.99
		ATOM 4585	CB	ASP	D	54	62.328	50.148	154.662	1.00	60.80
		ATOM 4586	CG	ASP	D	54	62.795	50.137	156.114	1.00	76.57
		ATOM 4587	OD1	ASP	D	54	63.303	51.182	156.577	1.00	86.00
15		ATOM 4588	OD2	ASP	D	54	62.654	49.093	156.794	1.00	80.50
		ATOM 4589	N	THR	D	55	65.647	50.133	154.106	1.00	33.45
		ATOM 4590	CA	THR	D	55	66.841	49.319	153.982	1.00	35.17
		ATOM 4591	C	THR	D	55	66.666	47.941	154.603	1.00	36.43
		ATOM 4592	O	THR	D	55	66.279	47.804	155.760	1.00	49.93
20		ATOM 4593	CB	THR	D	55	68.055	50.012	154.646	1.00	34.05
		ATOM 4594	OG1	THR	D	55	68.453	51.131	153.848	1.00	43.98
		ATOM 4595	CG2	THR	D	55	69.228	49.049	154.797	1.00	33.82
		ATOM 4596	N	ILE	D	56	66.984	46.925	153.818	1.00	30.06
		ATOM 4597	CA	ILE	D	56	66.903	45.539	154.239	1.00	17.48
25		ATOM 4598	C	ILE	D	56	68.267	45.209	154.811	1.00	16.97

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	ATOM 4599 O	ILE D	56	69.300	45.603	154.270	1.00	26.26
	ATOM 4600 CB	ILE D	56	66.593	44.606	153.005	1.00	19.67
	ATOM 4601 CG1	ILE D	56	65.243	44.994	152.376	1.00	8.91
	ATOM 4602 CG2	ILE D	56	66.581	43.139	153.407	1.00	11.02
5	ATOM 4603 CD1	ILE D	56	64.934	44.330	151.078	1.00	14.08
	ATOM 4604 N	PRO D	57	68.290	44.519	155.943	1.00	16.98
	ATOM 4605 CA	PRO D	57	69.528	44.125	156.609	1.00	28.98
	ATOM 4606 C	PRO D	57	70.522	43.526	155.638	1.00	36.14
	ATOM 4607 O	PRO D	57	70.164	42.671	154.827	1.00	42.96
10	ATOM 4608 CB	PRO D	57	69.051	43.062	157.595	1.00	27.18
	ATOM 4609 CG	PRO D	57	67.770	43.588	158.023	1.00	21.32
	ATOM 4610 CD	PRO D	57	67.124	44.083	156.721	1.00	24.67
	ATOM 4611 N	ASP D	58	71.770	43.971	155.728	1.00	47.97
	ATOM 4612 CA	ASP D	58	72.818	43.452	154.864	1.00	54.03
15	ATOM 4613 C	ASP D	58	72.992	41.966	155.125	1.00	54.98
	ATOM 4614 O	ASP D	58	72.832	41.497	156.258	1.00	62.94
	ATOM 4615 CB	ASP D	58	74.153	44.139	155.153	1.00	57.05
	ATOM 4616 CG	ASP D	58	74.139	45.607	154.817	1.00	71.66
	ATOM 4617 OD1	ASP D	58	73.176	46.070	154.155	1.00	72.00
20	ATOM 4618 OD2	ASP D	58	75.104	46.294	155.225	1.00	82.91
	ATOM 4619 N	CYS D	59	73.287	41.222	154.071	1.00	51.14
	ATOM 4620 CA	CYS D	59	73.530	39.804	154.219	1.00	49.89
	ATOM 4621 C	CYS D	59	75.022	39.618	153.939	1.00	47.96
	ATOM 4622 O	CYS D	59	75.484	39.865	152.816	1.00	46.55
25	ATOM 4623 CB	CYS D	59	72.692	39.006	153.224	1.00	51.28

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	ATOM 4624 SG CYS D 59 72.684 37.214 153.575 1.00 71.21
	ATOM 4625 N VAL D 60 75.794 39.293 154.975 1.00 40.83
	ATOM 4626 CA VAL D 60 77.228 39.084 154.799 1.00 34.68
	ATOM 4627 C VAL D 60 77.498 37.651 154.391 1.00 36.95
5	ATOM 4628 O VAL D 60 77.126 36.695 155.092 1.00 44.28
	ATOM 4629 CB VAL D 60 78.049 39.442 156.055 1.00 34.35
	ATOM 4630 CG1 VAL D 60 77.926 40.931 156.348 1.00 32.34
	ATOM 4631 CG2 VAL D 60 77.604 38.605 157.251 1.00 41.66
	ATOM 4632 N ALA D 61 78.106 37.523 153.220 1.00 40.08
10	ATOM 4633 CA ALA D 61 78.438 36.233 152.630 1.00 47.45
	ATOM 4634 C ALA D 61 79.407 35.423 153.467 1.00 55.12
	ATOM 4635 O ALA D 61 80.337 35.971 154.069 1.00 64.41
	ATOM 4636 CB ALA D 61 79.005 36.436 151.246 1.00 44.70
	ATOM 4637 N LYS D 62 79.189 34.114 153.507 1.00 58.95
15	ATOM 4638 CA LYS D 62 80.069 33.255 154.269 1.00 53.06
	ATOM 4639 C LYS D 62 81.436 33.292 153.602 1.00 51.00
	ATOM 4640 O LYS D 62 81.556 33.598 152.416 1.00 37.53
	ATOM 4641 CB LYS D 62 79.527 31.838 154.326 1.00 46.73
	ATOM 4642 N LYS D 63 82.459 33.006 154.401 1.00 59.88
20	ATOM 4643 CA LYS D 63 83.871 32.987 153.977 1.00 63.94
	ATOM 4644 C LYS D 63 84.193 32.480 152.542 1.00 63.51
	ATOM 4645 O LYS D 63 84.680 33.265 151.695 1.00 59.80
	ATOM 4646 CB LYS D 63 84.716 32.226 155.027 1.00 72.74
	ATOM 4647 N ARG D 64 83.952 31.207 152.256 1.00 66.84
25	ATOM 4648 CA ARG D 64 84.264 30.706 150.920 1.00 76.77

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	ATOM 4649 C	ARG D	64	83.137	30.890	149.902	1.00	78.25
	ATOM 4650 O	ARG D	64	83.387	31.244	148.745	1.00	74.14
	ATOM 4651 CB	ARG D	64	84.681	29.246	150.992	1.00	79.43
	ATOM 4652 N	GLN D	65	81.905	30.642	150.352	1.00	76.90
5	ATOM 4653 CA	GLN D	65	80.708	30.734	149.521	1.00	65.93
	ATOM 4654 C	GLN D	65	80.455	32.120	148.956	1.00	53.53
	ATOM 4655 O	GLN D	65	80.533	33.108	149.670	1.00	50.32
	ATOM 4656 CB	GLN D	65	79.471	30.262	150.303	1.00	73.89
	ATOM 4657 CG	GLN D	65	79.347	28.739	150.455	1.00	96.27
10	ATOM 4658 CD	GLN D	65	79.132	27.999	149.126	1.00	107.47
	ATOM 4659 OE1	GLN D	65	79.903	28.153	148.179	1.00	108.86
	ATOM 4660 NE2	GLN D	65	78.084	27.185	149.066	1.00	111.67
	ATOM 4661 N	ASN D	66	80.181	32.177	147.657	1.00	46.14
	ATOM 4662 CA	ASN D	66	79.881	33.431	146.979	1.00	44.60
15	ATOM 4663 C	ASN D	66	78.391	33.504	146.684	1.00	44.55
	ATOM 4664 O	ASN D	66	77.957	33.415	145.528	1.00	43.01
	ATOM 4665 CB	ASN D	66	80.697	33.578	145.698	1.00	55.21
	ATOM 4666 CG	ASN D	66	81.951	34.405	145.911	1.00	70.58
	ATOM 4667 OD1	ASN D	66	81.887	35.550	146.389	1.00	67.32
20	ATOM 4668 ND2	ASN D	66	83.105	33.830	145.574	1.00	66.80
	ATOM 4669 N	ASN D	67	77.626	33.625	147.771	1.00	41.52
	ATOM 4670 CA	ASN D	67	76.161	33.713	147.778	1.00	27.94
	ATOM 4671 C	ASN D	67	75.690	34.033	149.201	1.00	27.70
	ATOM 4672 O	ASN D	67	76.414	33.793	150.178	1.00	31.45
25	ATOM 4673 CB	ASN D	67	75.523	32.389	147.327	1.00	28.91

	ATOM 4674	CG	ASN	D	67	75.843	31.204	148.268	1.00	39.58
	ATOM 4675	OD1	ASN	D	67	75.511	31.221	149.456	1.00	45.93
	ATOM 4676	ND2	ASN	D	67	76.453	30.156	147.716	1.00	34.88
	ATOM 4677	N	CYS	D	68	74.503	34.611	149.316	1.00	21.28
5	ATOM 4678	CA	CYS	D	68	73.948	34.925	150.612	1.00	29.78
	ATOM 4679	C	CYS	D	68	72.450	34.746	150.447	1.00	28.22
	ATOM 4680	O	CYS	D	68	71.928	34.864	149.346	1.00	36.26
	ATOM 4681	CB	CYS	D	68	74.312	36.350	151.079	1.00	38.53
	ATOM 4682	SG	CYS	D	68	74.481	36.525	152.911	1.00	72.60
10	ATOM 4683	N	SER	D	69	71.774	34.471	151.554	1.00	27.33
	ATOM 4684	CA	SER	D	69	70.346	34.235	151.587	1.00	16.16
	ATOM 4685	C	SER	D	69	69.613	35.248	152.455	1.00	19.00
	ATOM 4686	O	SER	D	69	69.983	35.447	153.611	1.00	39.07
	ATOM 4687	CB	SER	D	69	70.127	32.843	152.169	1.00	11.38
15	ATOM 4688	OG	SER	D	69	68.762	32.538	152.297	1.00	38.13
	ATOM 4689	N	ILE	D	70	68.584	35.890	151.910	1.00	15.21
	ATOM 4690	CA	ILE	D	70	67.777	36.836	152.691	1.00	18.36
	ATOM 4691	C	ILE	D	70	66.541	36.086	153.196	1.00	18.86
	ATOM 4692	O	ILE	D	70	65.694	35.694	152.403	1.00	21.58
20	ATOM 4693	CB	ILE	D	70	67.303	38.027	151.857	1.00	13.74
	ATOM 4694	CG1	ILE	D	70	68.497	38.783	151.311	1.00	9.96
	ATOM 4695	CG2	ILE	D	70	66.463	38.987	152.714	1.00	12.55
	ATOM 4696	CD1	ILE	D	70	68.081	39.854	150.334	1.00	29.85
	ATOM 4697	N	PRO	D	71	66.401	35.929	154.523	1.00	18.05
25	ATOM 4698	CA	PRO	D	71	65.266	35.217	155.104	1.00	16.28

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	ATOM 4699 C	PRO D	71	63.989	35.963	154.784	1.00	14.43
	ATOM 4700 O	PRO D	71	63.988	37.191	154.745	1.00	9.74
	ATOM 4701 CB	PRO D	71	65.598	35.237	156.591	1.00	15.47
	ATOM 4702 CG	PRO D	71	66.185	36.581	156.742	1.00	15.88
5	ATOM 4703 CD	PRO D	71	67.144	36.639	155.578	1.00	20.31
	ATOM 4704 N	ARG D	72	62.901	35.224	154.584	1.00	15.99
	ATOM 4705 CA	ARG D	72	61.641	35.846	154.232	1.00	13.65
	ATOM 4706 C	ARG D	72	61.105	36.802	155.257	1.00	15.09
	ATOM 4707 O	ARG D	72	60.252	37.608	154.933	1.00	22.19
10	ATOM 4708 CB	ARG D	72	60.597	34.825	153.854	1.00	9.84
	ATOM 4709 CG	ARG D	72	59.589	34.588	154.884	1.00	34.25
	ATOM 4710 CD	ARG D	72	58.223	34.855	154.377	1.00	28.90
	ATOM 4711 NE	ARG D	72	57.934	36.268	154.249	1.00	16.24
	ATOM 4712 CZ	ARG D	72	56.695	36.727	154.139	1.00	28.13
15	ATOM 4713 NH1	ARG D	72	55.674	35.872	154.148	1.00	34.21
	ATOM 4714 NH2	ARG D	72	56.476	38.024	154.001	1.00	5.45
	ATOM 4715 N	LYS D	73	61.586	36.717	156.491	1.00	17.91
	ATOM 4716 CA	LYS D	73	61.137	37.660	157.507	1.00	17.15
	ATOM 4717 C	LYS D	73	61.580	39.069	157.112	1.00	11.87
20	ATOM 4718 O	LYS D	73	61.013	40.057	157.558	1.00	20.13
	ATOM 4719 CB	LYS D	73	61.696	37.308	158.885	1.00	22.05
	ATOM 4720 CG	LYS D	73	63.219	37.277	158.967	1.00	46.33
	ATOM 4721 CD	LYS D	73	63.710	36.996	160.387	1.00	47.83
	ATOM 4722 CE	LYS D	73	65.224	36.861	160.452	1.00	45.70
25	ATOM 4723 NZ	LYS D	73	65.701	36.733	161.858	1.00	60.90

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	ATOM 4724 N	ASN D	74	62.589	39.162	156.255	1.00	18.98
	ATOM 4725 CA	ASN D	74	63.089	40.471	155.809	1.00	25.60
	ATOM 4726 C	ASN D	74	62.545	40.916	154.446	1.00	28.74
	ATOM 4727 O	ASN D	74	62.767	42.046	154.033	1.00	35.51
5	ATOM 4728 CB	ASN D	74	64.629	40.517	155.756	1.00	20.17
	ATOM 4729 CG	ASN D	74	65.292	40.313	157.123	1.00	36.94
	ATOM 4730 OD1	ASN D	74	66.499	40.065	157.197	1.00	37.85
	ATOM 4731 ND2	ASN D	74	64.518	40.431	158.205	1.00	29.70
	ATOM 4732 N	LEU D	75	61.818	40.056	153.752	1.00	22.01
10	ATOM 4733 CA	LEU D	75	61.299	40.429	152.448	1.00	13.31
	ATOM 4734 C	LEU D	75	59.838	40.800	152.501	1.00	12.75
	ATOM 4735 O	LEU D	75	59.097	40.331	153.350	1.00	23.51
	ATOM 4736 CB	LEU D	75	61.416	39.256	151.485	1.00	13.79
	ATOM 4737 CG	LEU D	75	62.760	38.579	151.481	1.00	14.71
15	ATOM 4738 CD1	LEU D	75	62.633	37.193	150.921	1.00	13.59
	ATOM 4739 CD2	LEU D	75	63.676	39.426	150.683	1.00	15.57
	ATOM 4740 N	LEU D	76	59.424	41.639	151.567	1.00	10.06
	ATOM 4741 CA	LEU D	76	58.032	41.996	151.453	1.00	12.89
	ATOM 4742 C	LEU D	76	57.669	41.364	150.130	1.00	14.38
20	ATOM 4743 O	LEU D	76	58.040	41.851	149.068	1.00	24.98
	ATOM 4744 CB	LEU D	76	57.809	43.509	151.395	1.00	24.87
	ATOM 4745 CG	LEU D	76	56.484	43.936	150.700	1.00	36.35
	ATOM 4746 CD1	LEU D	76	55.226	43.459	151.416	1.00	22.10
	ATOM 4747 CD2	LEU D	76	56.432	45.430	150.564	1.00	45.78
25	ATOM 4748 N	LEU D	77	57.016	40.223	150.199	1.00	9.46

	ATOM 4749 CA	LEU D	77	56.632	39.538	148.994	1.00	6.99
	ATOM 4750 C	LEU D	77	55.571	40.331	148.247	1.00	2.65
	ATOM 4751 O	LEU D	77	54.839	41.114	148.823	1.00	20.08
	ATOM 4752 CB	LEU D	77	56.176	38.116	149.319	1.00	12.92
5	ATOM 4753 CG	LEU D	77	57.143	37.280	150.175	1.00	2.00
	ATOM 4754 CD1	LEU D	77	56.586	35.890	150.369	1.00	12.48
	ATOM 4755 CD2	LEU D	77	58.479	37.191	149.542	1.00	12.99
	ATOM 4756 N	TYR D	78	55.548	40.139	146.939	1.00	5.91
	ATOM 4757 CA	TYR D	78	54.626	40.798	146.019	1.00	7.83
10	ATOM 4758 C	TYR D	78	54.817	42.299	145.868	1.00	18.46
	ATOM 4759 O	TYR D	78	53.867	43.031	145.542	1.00	16.40
	ATOM 4760 CB	TYR D	78	53.168	40.433	146.278	1.00	6.39
	ATOM 4761 CG	TYR D	78	52.916	38.943	146.186	1.00	14.84
	ATOM 4762 CD1	TYR D	78	53.093	38.136	147.257	1.00	13.50
15	ATOM 4763 CD2	TYR D	78	52.553	38.332	145.025	1.00	11.59
	ATOM 4764 CE1	TYR D	78	52.923	36.763	147.180	1.00	4.09
	ATOM 4765 CE2	TYR D	78	52.383	36.947	144.962	1.00	2.00
	ATOM 4766 CZ	TYR D	78	52.573	36.178	146.053	1.00	2.00
	ATOM 4767 OH	TYR D	78	52.419	34.821	146.059	1.00	13.83
20	ATOM 4768 N	GLN D	79	56.074	42.721	146.042	1.00	16.63
	ATOM 4769 CA	GLN D	79	56.499	44.094	145.855	1.00	23.80
	ATOM 4770 C	GLN D	79	57.979	44.056	145.451	1.00	23.76
	ATOM 4771 O	GLN D	79	58.712	43.170	145.891	1.00	29.48
	ATOM 4772 CB	GLN D	79	56.266	44.949	147.103	1.00	31.39
25	ATOM 4773 CG	GLN D	79	56.277	46.480	146.798	1.00	53.75

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		ATOM 4774	CD	GLN	D	79	55.570	46.886	145.467	1.00	57.60
		ATOM 4775	OE1	GLN	D	79	54.349	47.031	145.402	1.00	59.47
		ATOM 4776	NE2	GLN	D	79	56.359	47.100	144.424	1.00	59.44
		ATOM 4777	N	TYR	D	80	58.372	44.953	144.540	1.00	18.66
5		ATOM 4778	CA	TYR	D	80	59.739	45.055	144.021	1.00	8.69
		ATOM 4779	C	TYR	D	80	60.797	45.508	145.012	1.00	12.59
		ATOM 4780	O	TYR	D	80	60.501	46.206	145.960	1.00	21.45
		ATOM 4781	CB	TYR	D	80	59.750	45.966	142.803	1.00	2.00
		ATOM 4782	CG	TYR	D	80	58.937	45.418	141.655	1.00	18.59
10		ATOM 4783	CD1	TYR	D	80	59.428	44.437	140.842	1.00	14.99
		ATOM 4784	CD2	TYR	D	80	57.679	45.869	141.386	1.00	13.10
		ATOM 4785	CE1	TYR	D	80	58.677	43.918	139.784	1.00	27.54
		ATOM 4786	CE2	TYR	D	80	56.926	45.352	140.321	1.00	18.04
		ATOM 4787	CZ	TYR	D	80	57.431	44.376	139.525	1.00	29.16
15		ATOM 4788	OH	TYR	D	80	56.700	43.843	138.477	1.00	46.06
		ATOM 4789	N	MET	D	81	62.038	45.108	144.794	1.00	18.76
		ATOM 4790	CA	MET	D	81	63.123	45.489	145.680	1.00	12.80
		ATOM 4791	C	MET	D	81	64.401	45.545	144.872	1.00	20.79
		ATOM 4792	O	MET	D	81	64.573	44.820	143.889	1.00	21.76
20		ATOM 4793	CB	MET	D	81	63.264	44.491	146.827	1.00	5.18
		ATOM 4794	CG	MET	D	81	63.548	43.053	146.395	1.00	6.32
		ATOM 4795	SD	MET	D	81	63.624	41.850	147.747	1.00	24.92
		ATOM 4796	CE	MET	D	81	65.223	42.171	148.406	1.00	18.81
		ATOM 4797	N	ALA	D	82	65.279	46.440	145.283	1.00	19.78
25		ATOM 4798	CA	ALA	D	82	66.552	46.639	144.628	1.00	17.60

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	ATOM 4799 C	ALA D	82	67.574	45.819	145.366	1.00	14.71
	ATOM 4800 O	ALA D	82	67.650	45.894	146.587	1.00	27.04
	ATOM 4801 CB	ALA D	82	66.927	48.095	144.685	1.00	15.39
	ATOM 4802 N	ILE D	83	68.365	45.048	144.630	1.00	20.05
5	ATOM 4803 CA	ILE D	83	69.394	44.193	145.225	1.00	19.94
	ATOM 4804 C	ILE D	83	70.703	44.369	144.487	1.00	21.62
	ATOM 4805 O	ILE D	83	70.718	44.497	143.261	1.00	19.82
	ATOM 4806 CB	ILE D	83	69.034	42.708	145.092	1.00	9.28
	ATOM 4807 CG1	ILE D	83	67.575	42.494	145.452	1.00	16.52
10	ATOM 4808 CG2	ILE D	83	69.871	41.896	146.021	1.00	13.92
	ATOM 4809 CD1	ILE D	83	67.084	41.149	145.152	1.00	24.27
	ATOM 4810 N	TRP D	84	71.796	44.378	145.237	1.00	19.90
	ATOM 4811 CA	TRP D	84	73.125	44.505	144.665	1.00	10.99
	ATOM 4812 C	TRP D	84	74.113	43.980	145.670	1.00	9.48
15	ATOM 4813 O	TRP D	84	73.830	43.889	146.864	1.00	12.14
	ATOM 4814 CB	TRP D	84	73.447	45.959	144.318	1.00	21.53
	ATOM 4815 CG	TRP D	84	73.655	46.844	145.498	1.00	36.67
	ATOM 4816 CD1	TRP D	84	74.845	47.163	146.087	1.00	31.35
	ATOM 4817 CD2	TRP D	84	72.645	47.533	146.234	1.00	46.45
20	ATOM 4818 NE1	TRP D	84	74.633	48.008	147.145	1.00	43.33
	ATOM 4819 CE2	TRP D	84	73.291	48.252	147.258	1.00	45.23
	ATOM 4820 CE3	TRP D	84	71.254	47.616	146.126	1.00	49.93
	ATOM 4821 CZ2	TRP D	84	72.594	49.043	148.166	1.00	47.17
	ATOM 4822 CZ3	TRP D	84	70.566	48.402	147.027	1.00	46.02
25	ATOM 4823 CH2	TRP D	84	71.235	49.106	148.034	1.00	49.99

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	ATOM 4824 N	VAL D	85	75.280	43.626	145.182	1.00	14.67
	ATOM 4825 CA	VAL D	85	76.321	43.120	146.046	1.00	27.55
	ATOM 4826 C	VAL D	85	77.521	44.084	146.030	1.00	38.37
	ATOM 4827 O	VAL D	85	77.840	44.667	144.987	1.00	36.34
5	ATOM 4828 CB	VAL D	85	76.698	41.683	145.638	1.00	23.36
	ATOM 4829 CG1	VAL D	85	76.873	41.583	144.152	1.00	23.23
	ATOM 4830 CG2	VAL D	85	77.943	41.246	146.348	1.00	33.97
	ATOM 4831 N	GLN D	86	78.151	44.274	147.191	1.00	38.74
	ATOM 4832 CA	GLN D	86	79.279	45.195	147.338	1.00	40.69
10	ATOM 4833 C	GLN D	86	80.524	44.495	147.850	1.00	43.46
	ATOM 4834 O	GLN D	86	80.473	43.745	148.823	1.00	46.69
	ATOM 4835 CB	GLN D	86	78.886	46.321	148.300	1.00	46.60
	ATOM 4836 CG	GLN D	86	79.979	47.309	148.699	1.00	49.56
	ATOM 4837 CD	GLN D	86	79.557	48.172	149.890	1.00	62.04
15	ATOM 4838 OE1	GLN D	86	80.014	47.961	151.012	1.00	67.23
	ATOM 4839 NE2	GLN D	86	78.661	49.127	149.653	1.00	63.52
	ATOM 4840 N	ALA D	87	81.645	44.763	147.196	1.00	50.38
	ATOM 4841 CA	ALA D	87	82.919	44.168	147.568	1.00	49.87
	ATOM 4842 C	ALA D	87	83.812	45.191	148.246	1.00	56.74
20	ATOM 4843 O	ALA D	87	84.185	46.201	147.631	1.00	54.82
	ATOM 4844 CB	ALA D	87	83.598	43.628	146.350	1.00	54.62
	ATOM 4845 N	GLU D	88	84.133	44.923	149.512	1.00	64.50
	ATOM 4846 CA	GLU D	88	84.975	45.787	150.340	1.00	69.20
	ATOM 4847 C	GLU D	88	86.334	45.115	150.548	1.00	62.90
25	ATOM 4848 O	GLU D	88	86.446	44.052	151.173	1.00	45.45

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	ATOM 4849	CB	GLU	D	88	84.286	46.066	151.695	1.00	90.53
	ATOM 4850	CG	GLU	D	88	84.993	47.085	152.618	1.00	119.16
	ATOM 4851	CD	GLU	D	88	84.364	47.186	154.017	1.00	134.64
	ATOM 4852	OE1	GLU	D	88	84.798	46.447	154.932	1.00	138.31
5	ATOM 4853	OE2	GLU	D	88	83.446	48.016	154.207	1.00	142.93
	ATOM 4854	N	ASN	D	89	87.363	45.744	150.003	1.00	63.89
	ATOM 4855	CA	ASN	D	89	88.719	45.243	150.102	1.00	60.70
	ATOM 4856	C	ASN	D	89	89.539	46.358	150.712	1.00	61.31
	ATOM 4857	O	ASN	D	89	89.171	47.524	150.600	1.00	55.72
10	ATOM 4858	CB	ASN	D	89	89.237	44.948	148.705	1.00	62.52
	ATOM 4859	CG	ASN	D	89	90.403	44.032	148.717	1.00	62.16
	ATOM 4860	OD1	ASN	D	89	90.599	43.292	149.672	1.00	68.29
	ATOM 4861	ND2	ASN	D	89	91.190	44.057	147.652	1.00	67.04
	ATOM 4862	N	MET	D	90	90.670	46.017	151.313	1.00	64.81
15	ATOM 4863	CA	MET	D	90	91.533	47.026	151.926	1.00	70.63
	ATOM 4864	C	MET	D	90	92.020	48.119	150.944	1.00	70.43
	ATOM 4865	O	MET	D	90	92.514	49.161	151.383	1.00	73.62
	ATOM 4866	CB	MET	D	90	92.727	46.338	152.598	1.00	76.23
	ATOM 4867	CG	MET	D	90	93.725	47.275	153.253	1.00	78.90
20	ATOM 4868	SD	MET	D	90	95.294	46.462	153.546	1.00	89.15
	ATOM 4869	CE	MET	D	90	96.092	46.621	151.918	1.00	72.63
	ATOM 4870	N	LEU	D	91	91.849	47.895	149.635	1.00	68.60
	ATOM 4871	CA	LEU	D	91	92.290	48.847	148.595	1.00	66.51
	ATOM 4872	C	LEU	D	91	91.188	49.420	147.697	1.00	62.84
25	ATOM 4873	O	LEU	D	91	91.460	49.847	146.567	1.00	63.02

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	ATOM 4874 CB	LEU D	91	93.329	48.198	147.661	1.00	72.97
	ATOM 4875 CG	LEU D	91	94.665	47.608	148.126	1.00	75.87
	ATOM 4876 CD1	LEU D	91	95.542	47.400	146.893	1.00	74.82
	ATOM 4877 CD2	LEU D	91	95.362	48.533	149.110	1.00	77.06
5	ATOM 4878 N	GLY D	92	89.944	49.386	148.150	1.00	62.37
	ATOM 4879 CA	GLY D	92	88.881	49.909	147.311	1.00	59.09
	ATOM 4880 C	GLY D	92	87.580	49.149	147.439	1.00	57.49
	ATOM 4881 O	GLY D	92	87.508	48.119	148.120	1.00	48.88
	ATOM 4882 N	SER D	93	86.552	49.655	146.767	1.00	59.68
10	ATOM 4883 CA	SER D	93	85.224	49.051	146.801	1.00	58.43
	ATOM 4884 C	SER D	93	84.647	49.017	145.402	1.00	60.92
	ATOM 4885 O	SER D	93	85.049	49.799	144.522	1.00	58.47
	ATOM 4886 CB	SER D	93	84.263	49.857	147.695	1.00	57.02
	ATOM 4887 OG	SER D	93	84.674	49.885	149.055	1.00	69.45
15	ATOM 4888 N	SER D	94	83.694	48.111	145.213	1.00	61.10
	ATOM 4889 CA	SER D	94	83.007	47.951	143.939	1.00	62.81
	ATOM 4890 C	SER D	94	81.601	47.477	144.243	1.00	55.34
	ATOM 4891 O	SER D	94	81.352	46.916	145.312	1.00	51.59
	ATOM 4892 CB	SER D	94	83.710	46.912	143.077	1.00	64.44
20	ATOM 4893 OG	SER D	94	83.685	45.653	143.717	1.00	71.69
	ATOM 4894 N	GLU D	95	80.687	47.727	143.315	1.00	54.28
	ATOM 4895 CA	GLU D	95	79.294	47.335	143.469	1.00	53.99
	ATOM 4896 C	GLU D	95	78.817	46.804	142.133	1.00	55.02
	ATOM 4897 O	GLU D	95	79.311	47.216	141.076	1.00	65.43
25	ATOM 4898 CB	GLU D	95	78.401	48.538	143.833	1.00	57.73

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		ATOM 4899	CG	GLU	D	95	78.691	49.242	145.155	1.00	71.40
		ATOM 4900	CD	GLU	D	95	77.785	50.445	145.388	1.00	79.52
		ATOM 4901	OE1	GLU	D	95	77.749	50.947	146.533	1.00	95.58
		ATOM 4902	OE2	GLU	D	95	77.111	50.895	144.432	1.00	85.38
5		ATOM 4903	N	SER	D	96	77.835	45.913	142.190	1.00	53.00
		ATOM 4904	CA	SER	D	96	77.231	45.328	141.002	1.00	41.19
		ATOM 4905	C	SER	D	96	76.075	46.215	140.557	1.00	36.88
		ATOM 4906	O	SER	D	96	75.581	47.041	141.329	1.00	43.10
		ATOM 4907	CB	SER	D	96	76.678	43.942	141.344	1.00	40.61
10		ATOM 4908	OG	SER	D	96	75.619	44.009	142.294	1.00	38.33
		ATOM 4909	N	PRO	D	97	75.684	46.129	139.281	1.00	35.95
		ATOM 4910	CA	PRO	D	97	74.560	46.975	138.890	1.00	43.92
		ATOM 4911	C	PRO	D	97	73.351	46.481	139.695	1.00	46.64
		ATOM 4912	O	PRO	D	97	73.283	45.299	140.052	1.00	43.32
15		ATOM 4913	CB	PRO	D	97	74.424	46.695	137.390	1.00	46.76
		ATOM 4914	CG	PRO	D	97	75.094	45.363	137.201	1.00	34.32
		ATOM 4915	CD	PRO	D	97	76.272	45.465	138.110	1.00	40.02
		ATOM 4916	N	LYS	D	98	72.443	47.389	140.034	1.00	46.79
		ATOM 4917	CA	LYS	D	98	71.286	47.023	140.824	1.00	37.73
20		ATOM 4918	C	LYS	D	98	70.257	46.226	140.060	1.00	39.13
		ATOM 4919	O	LYS	D	98	69.883	46.554	138.924	1.00	41.56
		ATOM 4920	CB	LYS	D	98	70.655	48.254	141.484	1.00	40.92
		ATOM 4921	CG	LYS	D	98	71.507	48.835	142.618	1.00	37.81
		ATOM 4922	CD	LYS	D	98	70.848	50.037	143.272	1.00	34.66
25		ATOM 4923	CE	LYS	D	98	71.787	50.723	144.271	1.00	47.80

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		ATOM 4924	NZ	LYS	D	98	73.008	51.326	143.642	1.00	41.09
		ATOM 4925	N	LEU	D	99	69.840	45.138	140.693	1.00	32.73
		ATOM 4926	CA	LEU	D	99	68.848	44.243	140.134	1.00	35.30
		ATOM 4927	C	LEU	D	99	67.499	44.606	140.748	1.00	29.11
5		ATOM 4928	O	LEU	D	99	67.440	45.003	141.915	1.00	29.50
		ATOM 4929	CB	LEU	D	99	69.246	42.805	140.462	1.00	43.37
		ATOM 4930	CG	LEU	D	99	68.379	41.677	139.927	1.00	50.33
		ATOM 4931	CD1	LEU	D	99	68.101	41.839	138.425	1.00	68.58
		ATOM 4932	CD2	LEU	D	99	69.092	40.393	140.231	1.00	48.24
10		ATOM 4933	N	CYS	D	100	66.434	44.512	139.955	1.00	22.92
		ATOM 4934	CA	CYS	D	100	65.094	44.849	140.435	1.00	28.26
		ATOM 4935	C	CYS	D	100	64.104	43.695	140.260	1.00	29.33
		ATOM 4936	O	CYS	D	100	63.609	43.444	139.146	1.00	32.92
		ATOM 4937	CB	CYS	D	100	64.571	46.103	139.720	1.00	43.57
15		ATOM 4938	SG	CYS	D	100	63.129	46.931	140.500	1.00	58.02
		ATOM 4939	N	LEU	D	101	63.749	43.060	141.380	1.00	22.51
		ATOM 4940	CA	LEU	D	101	62.843	41.922	141.343	1.00	24.40
		ATOM 4941	C	LEU	D	101	61.833	41.895	142.469	1.00	26.14
		ATOM 4942	O	LEU	D	101	61.934	42.661	143.430	1.00	29.35
20		ATOM 4943	CB	LEU	D	101	63.669	40.623	141.393	1.00	22.87
		ATOM 4944	CG	LEU	D	101	64.672	40.455	142.553	1.00	17.30
		ATOM 4945	CD1	LEU	D	101	63.959	39.985	143.807	1.00	35.28
		ATOM 4946	CD2	LEU	D	101	65.763	39.454	142.186	1.00	11.35
		ATOM 4947	N	ASP	D	102	60.868	40.989	142.329	1.00	26.09
25		ATOM 4948	CA	ASP	D	102	59.831	40.721	143.324	1.00	15.95

		ATOM 4949 C	ASP D 102	60.208	39.278	143.606	1.00	8.66
		ATOM 4950 O	ASP D 102	60.195	38.452	142.709	1.00	20.81
		ATOM 4951 CB	ASP D 102	58.444	40.823	142.678	1.00	12.32
		ATOM 4952 CG	ASP D 102	57.324	40.316	143.573	1.00	22.04
5		ATOM 4953 OD1	ASP D 102	57.594	39.900	144.719	1.00	22.62
		ATOM 4954 OD2	ASP D 102	56.161	40.317	143.100	1.00	17.56
		ATOM 4955 N	PRO D 103	60.564	38.951	144.849	1.00	3.12
		ATOM 4956 CA	PRO D 103	60.951	37.570	145.145	1.00	6.36
		ATOM 4957 C	PRO D 103	60.013	36.501	144.565	1.00	12.33
10		ATOM 4958 O	PRO D 103	60.440	35.461	144.077	1.00	18.66
		ATOM 4959 CB	PRO D 103	60.981	37.555	146.663	1.00	2.00
		ATOM 4960 CG	PRO D 103	61.360	38.957	147.007	1.00	5.62
		ATOM 4961 CD	PRO D 103	60.474	39.741	146.084	1.00	5.66
		ATOM 4962 N	MET D 104	58.733	36.807	144.517	1.00	8.22
15		ATOM 4963 CA	MET D 104	57.782	35.849	144.010	1.00	7.63
		ATOM 4964 C	MET D 104	57.835	35.628	142.506	1.00	12.13
		ATOM 4965 O	MET D 104	57.210	34.699	141.984	1.00	20.63
		ATOM 4966 CB	MET D 104	56.378	36.222	144.482	1.00	2.03
		ATOM 4967 CG	MET D 104	56.238	36.238	145.999	1.00	2.00
20		ATOM 4968 SD	MET D 104	56.828	34.740	146.845	1.00	18.85
		ATOM 4969 CE	MET D 104	55.523	33.635	146.498	1.00	15.84
		ATOM 4970 N	ASP D 105	58.635	36.441	141.828	1.00	16.77
		ATOM 4971 CA	ASP D 105	58.791	36.364	140.376	1.00	15.50
		ATOM 4972 C	ASP D 105	59.946	35.461	139.991	1.00	20.35
25		ATOM 4973 O	ASP D 105	60.146	35.144	138.809	1.00	19.96

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	ATOM 4974 CB ASP D 105 59.085 37.754 139.812 1.00 20.14
	ATOM 4975 CG ASP D 105 57.837 38.585 139.579 1.00 23.19
	ATOM 4976 OD1 ASP D 105 56.717 38.026 139.629 1.00 32.35
	ATOM 4977 OD2 ASP D 105 57.985 39.806 139.316 1.00 24.94
5	ATOM 4978 N VAL D 106 60.738 35.100 140.989 1.00 10.13
	ATOM 4979 CA VAL D 106 61.889 34.269 140.753 1.00 9.07
	ATOM 4980 C VAL D 106 61.858 33.041 141.634 1.00 7.43
	ATOM 4981 O VAL D 106 62.862 32.588 142.168 1.00 10.50
	ATOM 4982 CB VAL D 106 63.155 35.089 140.963 1.00 19.01
10	ATOM 4983 CG1 VAL D 106 63.272 36.112 139.857 1.00 7.72
	ATOM 4984 CG2 VAL D 106 63.094 35.802 142.302 1.00 18.42
	ATOM 4985 N VAL D 107 60.675 32.487 141.767 1.00 10.98
	ATOM 4986 CA VAL D 107 60.496 31.311 142.582 1.00 13.10
	ATOM 4987 C VAL D 107 61.079 30.103 141.856 1.00 14.24
15	ATOM 4988 O VAL D 107 60.807 29.902 140.663 1.00 13.49
	ATOM 4989 CB VAL D 107 59.008 31.115 142.862 1.00 7.93
	ATOM 4990 CG1 VAL D 107 58.763 29.768 143.454 1.00 2.00
	ATOM 4991 CG2 VAL D 107 58.528 32.207 143.791 1.00 2.00
	ATOM 4992 N LYS D 108 61.921 29.349 142.563 1.00 6.69
20	ATOM 4993 CA LYS D 108 62.540 28.159 142.011 1.00 2.00
	ATOM 4994 C LYS D 108 61.595 27.006 142.228 1.00 8.12
	ATOM 4995 O LYS D 108 61.341 26.589 143.349 1.00 22.10
	ATOM 4996 CB LYS D 108 63.885 27.876 142.674 1.00 3.70
	ATOM 4997 CG LYS D 108 64.437 26.474 142.441 1.00 24.31
25	ATOM 4998 CD LYS D 108 65.796 26.265 143.102 1.00 30.67

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		ATOM 4999	CE	LYS	D	108	66.420	24.947	142.679	1.00	57.61
		ATOM 5000	NZ	LYS	D	108	67.900	24.924	142.919	1.00	76.10
		ATOM 5001	N	LEU	D	109	61.067	26.513	141.123	1.00	10.60
		ATOM 5002	CA	LEU	D	109	60.131	25.400	141.088	1.00	2.20
5		ATOM 5003	C	LEU	D	109	60.820	24.030	140.935	1.00	5.11
		ATOM 5004	O	LEU	D	109	61.906	23.914	140.367	1.00	14.75
		ATOM 5005	CB	LEU	D	109	59.188	25.631	139.904	1.00	6.60
		ATOM 5006	CG	LEU	D	109	57.710	25.981	140.062	1.00	2.13
		ATOM 5007	CD1	LEU	D	109	57.439	26.814	141.286	1.00	17.56
10		ATOM 5008	CD2	LEU	D	109	57.255	26.652	138.824	1.00	2.00
		ATOM 5009	N	GLU	D	110	60.195	23.000	141.482	1.00	9.30
		ATOM 5010	CA	GLU	D	110	60.716	21.656	141.387	1.00	2.00
		ATOM 5011	C	GLU	D	110	59.591	20.982	140.629	1.00	7.96
		ATOM 5012	O	GLU	D	110	58.442	21.419	140.692	1.00	9.57
15		ATOM 5013	CB	GLU	D	110	60.960	21.066	142.770	1.00	25.06
		ATOM 5014	CG	GLU	D	110	62.384	21.324	143.306	1.00	45.93
		ATOM 5015	CD	GLU	D	110	62.683	20.612	144.635	1.00	64.16
		ATOM 5016	OE1	GLU	D	110	62.595	19.360	144.686	1.00	85.27
		ATOM 5017	OE2	GLU	D	110	63.032	21.302	145.622	1.00	51.53
20		ATOM 5018	N	PRO	D	111	59.920	19.987	139.818	1.00	10.48
		ATOM 5019	CA	PRO	D	111	58.967	19.236	138.997	1.00	6.72
		ATOM 5020	C	PRO	D	111	57.793	18.620	139.725	1.00	11.32
		ATOM 5021	O	PRO	D	111	57.859	18.329	140.918	1.00	27.56
		ATOM 5022	CB	PRO	D	111	59.847	18.174	138.362	1.00	12.16
25		ATOM 5023	CG	PRO	D	111	60.924	17.977	139.413	1.00	24.57

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	ATOM 5024	CD	PRO	D	111	61.252	19.369	139.792	1.00	11.73
	ATOM 5025	N	PRO	D	112	56.689	18.415	139.008	1.00	9.19
	ATOM 5026	CA	PRO	D	112	55.473	17.825	139.571	1.00	3.79
	ATOM 5027	C	PRO	D	112	55.562	16.304	139.768	1.00	11.03
5	ATOM 5028	O	PRO	D	112	56.456	15.632	139.248	1.00	22.21
	ATOM 5029	CB	PRO	D	112	54.397	18.251	138.577	1.00	2.00
	ATOM 5030	CG	PRO	D	112	55.110	18.261	137.297	1.00	4.78
	ATOM 5031	CD	PRO	D	112	56.471	18.876	137.631	1.00	2.00
	ATOM 5032	N	MET	D	113	54.662	15.793	140.598	1.00	26.13
10	ATOM 5033	CA	MET	D	113	54.589	14.382	140.953	1.00	26.59
	ATOM 5034	C	MET	D	113	53.721	13.681	139.929	1.00	26.26
	ATOM 5035	O	MET	D	113	52.494	13.755	139.994	1.00	36.31
	ATOM 5036	CB	MET	D	113	54.004	14.236	142.377	1.00	48.41
	ATOM 5037	CG	MET	D	113	54.911	14.792	143.517	1.00	54.47
15	ATOM 5038	SD	MET	D	113	54.073	15.677	144.882	1.00	65.67
	ATOM 5039	CE	MET	D	113	52.696	14.539	145.283	1.00	70.64
	ATOM 5040	N	LEU	D	114	54.382	13.093	138.935	1.00	17.47
	ATOM 5041	CA	LEU	D	114	53.731	12.365	137.838	1.00	22.29
	ATOM 5042	C	LEU	D	114	53.806	10.864	138.117	1.00	26.05
20	ATOM 5043	O	LEU	D	114	54.882	10.329	138.380	1.00	28.77
	ATOM 5044	CB	LEU	D	114	54.422	12.685	136.493	1.00	8.18
	ATOM 5045	CG	LEU	D	114	53.919	12.023	135.197	1.00	10.05
	ATOM 5046	CD1	LEU	D	114	52.529	12.498	134.778	1.00	10.89
	ATOM 5047	CD2	LEU	D	114	54.935	12.284	134.100	1.00	9.00
25	ATOM 5048	N	GLN	D	115	52.681	10.173	138.023	1.00	31.35

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	ATOM	5049	CA	GLN	D	115	52.672	8.755	138.290	1.00	29.84
	ATOM	5050	C	GLN	D	115	51.649	8.074	137.393	1.00	32.73
	ATOM	5051	O	GLN	D	115	50.753	8.731	136.839	1.00	39.22
	ATOM	5052	CB	GLN	D	115	52.351	8.526	139.784	1.00	38.75
5	ATOM	5053	CG	GLN	D	115	50.932	8.935	140.225	1.00	50.03
	ATOM	5054	CD	GLN	D	115	50.859	9.368	141.682	1.00	63.77
	ATOM	5055	OE1	GLN	D	115	51.864	9.359	142.397	1.00	65.69
	ATOM	5056	NE2	GLN	D	115	49.673	9.797	142.116	1.00	74.58
	ATOM	5057	N	ALA	D	116	51.832	6.772	137.193	1.00	31.17
10	ATOM	5058	CA	ALA	D	116	50.898	5.963	136.409	1.00	25.62
	ATOM	5059	C	ALA	D	116	49.746	5.778	137.364	1.00	20.56
	ATOM	5060	O	ALA	D	116	49.969	5.569	138.545	1.00	33.36
	ATOM	5061	CB	ALA	D	116	51.515	4.642	136.070	1.00	36.55
	ATOM	5062	N	LEU	D	117	48.520	5.866	136.886	1.00	33.21
15	ATOM	5063	CA	LEU	D	117	47.367	5.783	137.779	1.00	48.63
	ATOM	5064	C	LEU	D	117	47.109	4.486	138.541	1.00	69.07
	ATOM	5065	O	LEU	D	117	47.528	3.406	138.106	1.00	74.14
	ATOM	5066	CB	LEU	D	117	46.117	6.179	137.012	1.00	47.64
	ATOM	5067	CG	LEU	D	117	44.896	6.472	137.867	1.00	57.70
20	ATOM	5068	CD1	LEU	D	117	45.169	7.644	138.805	1.00	68.44
	ATOM	5069	CD2	LEU	D	117	43.728	6.745	136.962	1.00	58.60
	ATOM	5070	N	ASP	D	118	46.400	4.626	139.670	1.00	95.32
	ATOM	5071	CA	ASP	D	118	45.987	3.532	140.562	1.00	117.60
	ATOM	5072	C	ASP	D	118	44.575	3.811	141.116	1.00	121.26
25	ATOM	5073	O	ASP	D	118	43.732	2.889	141.099	1.00	122.45

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	ATOM 5074 CB	ASP D 118	46.965	3.369	141.736	1.00	136.04
	ATOM 5075 CG	ASP D 118	48.228	2.609	141.355	1.00	152.44
	ATOM 5076 OD1	ASP D 118	49.334	3.125	141.625	1.00	158.15
	ATOM 5077 OD2	ASP D 118	48.119	1.491	140.801	1.00	162.00
5	ATOM 5078 N	ILE D 119	44.322	4.954	141.558	1.00	121.32
	ATOM 5079 N	GLN D 127	42.805	-0.292	128.287	1.00	60.29
	ATOM 5080 CA	GLN D 127	42.581	-0.032	126.835	1.00	71.73
	ATOM 5081 C	GLN D 127	43.878	-0.309	126.067	1.00	72.37
	ATOM 5082 O	GLN D 127	44.959	-0.021	126.565	1.00	70.13
10	ATOM 5083 CB	GLN D 127	42.129	1.397	126.625	1.00	73.67
	ATOM 5084 N	PRO D 128	43.776	-0.852	124.837	1.00	76.91
	ATOM 5085 CA	PRO D 128	44.888	-1.209	123.937	1.00	72.32
	ATOM 5086 C	PRO D 128	45.784	-0.071	123.461	1.00	65.58
	ATOM 5087 O	PRO D 128	45.341	0.805	122.720	1.00	63.10
15	ATOM 5088 CB	PRO D 128	44.174	-1.858	122.747	1.00	80.69
	ATOM 5089 CG	PRO D 128	42.867	-2.337	123.323	1.00	86.54
	ATOM 5090 CD	PRO D 128	42.487	-1.185	124.207	1.00	84.71
	ATOM 5091 N	GLY D 129	47.068	-0.165	123.797	1.00	62.24
	ATOM 5092 CA	GLY D 129	48.047	0.846	123.419	1.00	59.31
20	ATOM 5093 C	GLY D 129	47.914	2.159	124.180	1.00	60.70
	ATOM 5094 O	GLY D 129	48.407	3.202	123.710	1.00	49.88
	ATOM 5095 N	CYS D 130	47.290	2.088	125.364	1.00	55.44
	ATOM 5096 CA	CYS D 130	47.029	3.235	126.238	1.00	48.57
	ATOM 5097 C	CYS D 130	47.835	3.260	127.546	1.00	49.29
25	ATOM 5098 O	CYS D 130	48.444	2.267	127.939	1.00	56.38

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5	ATOM 5099 CB	CYS D 130	45.548	3.264	126.597	1.00	53.73
	ATOM 5100 SG	CYS D 130	44.520	4.514	125.760	1.00	83.90
	ATOM 5101 N	LEU D 131	47.790	4.403	128.229	1.00	42.80
	ATOM 5102 CA	LEU D 131	48.466	4.643	129.502	1.00	31.63
	ATOM 5103 C	LEU D 131	47.640	5.635	130.311	1.00	32.92
10	ATOM 5104 O	LEU D 131	47.006	6.530	129.751	1.00	38.42
	ATOM 5105 CB	LEU D 131	49.821	5.284	129.267	1.00	20.83
	ATOM 5106 CG	LEU D 131	51.044	4.404	129.088	1.00	38.74
	ATOM 5107 CD1	LEU D 131	52.274	5.285	128.832	1.00	30.33
	ATOM 5108 CD2	LEU D 131	51.234	3.543	130.337	1.00	43.52
15	ATOM 5109 N	TRP D 132	47.625	5.478	131.623	1.00	30.64
	ATOM 5110 CA	TRP D 132	46.893	6.418	132.444	1.00	38.52
	ATOM 5111 C	TRP D 132	47.888	7.067	133.380	1.00	42.03
	ATOM 5112 O	TRP D 132	48.738	6.392	133.980	1.00	44.03
	ATOM 5113 CB	TRP D 132	45.756	5.756	133.225	1.00	45.05
20	ATOM 5114 CG	TRP D 132	44.570	5.455	132.384	1.00	53.68
	ATOM 5115 CD1	TRP D 132	43.467	6.244	132.193	1.00	53.36
	ATOM 5116 CD2	TRP D 132	44.384	4.293	131.577	1.00	60.74
	ATOM 5117 NE1	TRP D 132	42.612	5.642	131.306	1.00	52.34
	ATOM 5118 CE2	TRP D 132	43.151	4.442	130.911	1.00	62.57
25	ATOM 5119 CE3	TRP D 132	45.147	3.132	131.347	1.00	76.94
	ATOM 5120 CZ2	TRP D 132	42.659	3.470	130.021	1.00	74.77
	ATOM 5121 CZ3	TRP D 132	44.661	2.167	130.466	1.00	80.86
	ATOM 5122 CH2	TRP D 132	43.426	2.344	129.813	1.00	80.88
	ATOM 5123 N	LEU D 133	47.795	8.387	133.464	1.00	36.91

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	ATOM 5124 CA	LEU D 133	48.674	9.162	134.302	1.00	27.66
	ATOM 5125 C	LEU D 133	47.911	9.915	135.360	1.00	26.92
	ATOM 5126 O	LEU D 133	46.677	10.014	135.331	1.00	26.34
	ATOM 5127 CB	LEU D 133	49.445	10.145	133.448	1.00	29.10
5	ATOM 5128 CG	LEU D 133	50.200	9.499	132.303	1.00	20.04
	ATOM 5129 CD1	LEU D 133	50.933	10.598	131.604	1.00	31.36
	ATOM 5130 CD2	LEU D 133	51.183	8.440	132.814	1.00	23.43
	ATOM 5131 N	SER D 134	48.681	10.466	136.280	1.00	20.97
	ATOM 5132 CA	SER D 134	48.159	11.236	137.375	1.00	21.98
10	ATOM 5133 C	SER D 134	49.312	12.135	137.789	1.00	14.17
	ATOM 5134 O	SER D 134	50.473	11.763	137.636	1.00	4.64
	ATOM 5135 CB	SER D 134	47.770	10.272	138.510	1.00	35.21
	ATOM 5136 OG	SER D 134	47.737	10.891	139.793	1.00	67.45
	ATOM 5137 N	TRP D 135	49.007	13.355	138.199	1.00	3.68
15	ATOM 5138 CA	TRP D 135	50.052	14.227	138.671	1.00	2.00
	ATOM 5139 C	TRP D 135	49.474	15.255	139.604	1.00	11.72
	ATOM 5140 O	TRP D 135	48.283	15.556	139.563	1.00	17.11
	ATOM 5141 CB	TRP D 135	50.877	14.857	137.520	1.00	14.09
	ATOM 5142 CG	TRP D 135	50.130	15.726	136.542	1.00	17.55
20	ATOM 5143 CD1	TRP D 135	49.755	17.029	136.715	1.00	7.20
	ATOM 5144 CD2	TRP D 135	49.592	15.319	135.280	1.00	18.88
	ATOM 5145 NE1	TRP D 135	48.994	17.447	135.651	1.00	17.33
	ATOM 5146 CE2	TRP D 135	48.878	16.415	134.758	1.00	14.20
	ATOM 5147 CE3	TRP D 135	49.636	14.127	134.548	1.00	19.91
25	ATOM 5148 CZ2	TRP D 135	48.213	16.353	133.548	1.00	23.00

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		ATOM	5149	CZ3	TRP	D	135	48.975	14.069	133.349	1.00	18.18
		ATOM	5150	CH2	TRP	D	135	48.271	15.175	132.859	1.00	26.50
		ATOM	5151	N	LYS	D	136	50.299	15.655	140.553	1.00	16.40
		ATOM	5152	CA	LYS	D	136	49.960	16.663	141.539	1.00	19.25
5		ATOM	5153	C	LYS	D	136	51.185	17.547	141.488	1.00	20.33
		ATOM	5154	O	LYS	D	136	52.241	17.100	141.058	1.00	21.33
		ATOM	5155	CB	LYS	D	136	49.858	16.040	142.916	1.00	29.95
		ATOM	5156	CG	LYS	D	136	48.669	15.143	143.122	1.00	53.64
		ATOM	5157	CD	LYS	D	136	48.653	14.636	144.564	1.00	81.31
10		ATOM	5158	CE	LYS	D	136	47.392	13.827	144.882	1.00	97.10
		ATOM	5159	NZ	LYS	D	136	46.138	14.640	144.844	1.00	103.10
		ATOM	5160	N	PRO	D	137	51.069	18.818	141.882	1.00	15.38
		ATOM	5161	CA	PRO	D	137	52.264	19.661	141.824	1.00	12.94
		ATOM	5162	C	PRO	D	137	53.167	19.491	143.032	1.00	12.46
15		ATOM	5163	O	PRO	D	137	52.822	18.785	143.987	1.00	20.39
		ATOM	5164	CB	PRO	D	137	51.676	21.068	141.784	1.00	5.17
		ATOM	5165	CG	PRO	D	137	50.521	20.942	142.691	1.00	2.00
		ATOM	5166	CD	PRO	D	137	49.889	19.618	142.236	1.00	9.04
		ATOM	5167	N	TRP	D	138	54.334	20.121	142.955	1.00	7.80
20		ATOM	5168	CA	TRP	D	138	55.303	20.116	144.018	1.00	5.18
		ATOM	5169	C	TRP	D	138	54.582	20.853	145.165	1.00	20.94
		ATOM	5170	O	TRP	D	138	54.322	22.055	145.095	1.00	25.94
		ATOM	5171	CB	TRP	D	138	56.517	20.872	143.526	1.00	2.00
		ATOM	5172	CG	TRP	D	138	57.633	20.941	144.503	1.00	11.82
25		ATOM	5173	CD1	TRP	D	138	58.113	19.928	145.276	1.00	4.72

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	ATOM	5174	CD2	TRP	D	138	58.381	22.109	144.860	1.00	8.94
	ATOM	5175	NE1	TRP	D	138	59.102	20.398	146.102	1.00	19.27
	ATOM	5176	CE2	TRP	D	138	59.285	21.735	145.864	1.00	9.04
	ATOM	5177	CE3	TRP	D	138	58.362	23.435	144.434	1.00	16.54
5	ATOM	5178	CZ2	TRP	D	138	60.163	22.636	146.450	1.00	11.69
	ATOM	5179	CZ3	TRP	D	138	59.241	24.335	145.021	1.00	19.33
	ATOM	5180	CH2	TRP	D	138	60.127	23.929	146.017	1.00	14.94
	ATOM	5181	N	LYS	D	139	54.261	20.125	146.224	1.00	18.61
	ATOM	5182	CA	LYS	D	139	53.500	20.686	147.333	1.00	13.00
10	ATOM	5183	C	LYS	D	139	53.782	22.098	147.832	1.00	11.18
	ATOM	5184	O	LYS	D	139	52.851	22.877	148.049	1.00	20.95
	ATOM	5185	CB	LYS	D	139	53.465	19.704	148.506	1.00	16.42
	ATOM	5186	CG	LYS	D	139	52.257	19.877	149.404	1.00	36.50
	ATOM	5187	CD	LYS	D	139	51.942	18.604	150.154	1.00	56.57
15	ATOM	5188	CE	LYS	D	139	50.475	18.568	150.530	1.00	75.41
	ATOM	5189	NZ	LYS	D	139	49.603	18.553	149.320	1.00	84.47
	ATOM	5190	N	PRO	D	140	55.057	22.471	147.994	1.00	6.83
	ATOM	5191	CA	PRO	D	140	55.354	23.821	148.492	1.00	3.71
	ATOM	5192	C	PRO	D	140	54.862	24.917	147.616	1.00	2.00
20	ATOM	5193	O	PRO	D	140	54.721	26.045	148.063	1.00	22.29
	ATOM	5194	CB	PRO	D	140	56.881	23.848	148.568	1.00	9.32
	ATOM	5195	CG	PRO	D	140	57.244	22.422	148.786	1.00	6.47
	ATOM	5196	CD	PRO	D	140	56.302	21.705	147.823	1.00	12.70
	ATOM	5197	N	SER	D	141	54.570	24.578	146.372	1.00	6.48
25	ATOM	5198	CA	SER	D	141	54.103	25.563	145.420	1.00	2.00

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		ATOM 5199	C	SER	D	141	52.669	25.326	145.021	1.00	2.00
		ATOM 5200	O	SER	D	141	52.195	25.952	144.084	1.00	5.10
		ATOM 5201	CB	SER	D	141	54.973	25.527	144.169	1.00	2.00
		ATOM 5202	OG	SER	D	141	54.746	24.348	143.423	1.00	6.86
5		ATOM 5203	N	GLU	D	142	51.955	24.491	145.768	1.00	3.54
		ATOM 5204	CA	GLU	D	142	50.576	24.168	145.413	1.00	7.54
		ATOM 5205	C	GLU	D	142	49.642	25.382	145.307	1.00	11.94
		ATOM 5206	O	GLU	D	142	48.632	25.334	144.587	1.00	17.99
		ATOM 5207	CB	GLU	D	142	50.011	23.083	146.348	1.00	5.74
10		ATOM 5208	CG	GLU	D	142	49.985	23.462	147.832	1.00	57.33
		ATOM 5209	CD	GLU	D	142	49.223	22.469	148.717	1.00	73.46
		ATOM 5210	OE1	GLU	D	142	48.665	21.474	148.187	1.00	71.26
		ATOM 5211	OE2	GLU	D	142	49.183	22.702	149.955	1.00	81.46
		ATOM 5212	N	TYR	D	143	50.015	26.481	145.970	1.00	6.23
15		ATOM 5213	CA	TYR	D	143	49.214	27.714	145.977	1.00	10.15
		ATOM 5214	C	TYR	D	143	49.344	28.511	144.690	1.00	15.58
		ATOM 5215	O	TYR	D	143	48.632	29.494	144.483	1.00	23.31
		ATOM 5216	CB	TYR	D	143	49.636	28.625	147.127	1.00	8.32
		ATOM 5217	CG	TYR	D	143	51.012	29.212	146.939	1.00	11.29
20		ATOM 5218	CD1	TYR	D	143	52.146	28.560	147.431	1.00	17.91
		ATOM 5219	CD2	TYR	D	143	51.187	30.378	146.223	1.00	7.59
		ATOM 5220	CE1	TYR	D	143	53.402	29.059	147.199	1.00	8.72
		ATOM 5221	CE2	TYR	D	143	52.431	30.876	145.983	1.00	12.61
		ATOM 5222	CZ	TYR	D	143	53.526	30.215	146.463	1.00	12.48
25		ATOM 5223	OH	TYR	D	143	54.749	30.696	146.123	1.00	15.73

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		ATOM 5224 N	MET D 144	50.304	28.113	143.866	1.00	14.46
		ATOM 5225 CA	MET D 144	50.594	28.769	142.606	1.00	13.23
		ATOM 5226 C	MET D 144	49.792	28.122	141.463	1.00	12.87
		ATOM 5227 O	MET D 144	49.731	26.902	141.374	1.00	21.71
5		ATOM 5228 CB	MET D 144	52.090	28.625	142.383	1.00	2.00
		ATOM 5229 CG	MET D 144	52.646	29.423	141.265	1.00	19.67
		ATOM 5230 SD	MET D 144	54.416	29.274	141.257	1.00	17.64
		ATOM 5231 CE	MET D 144	54.763	29.685	143.000	1.00	17.96
		ATOM 5232 N	GLU D 145	49.113	28.917	140.639	1.00	18.72
10		ATOM 5233 CA	GLU D 145	48.350	28.358	139.517	1.00	11.68
		ATOM 5234 C	GLU D 145	49.417	28.069	138.491	1.00	12.65
		ATOM 5235 O	GLU D 145	50.102	28.983	138.038	1.00	21.26
		ATOM 5236 CB	GLU D 145	47.391	29.386	138.934	1.00	8.32
		ATOM 5237 CG	GLU D 145	46.292	28.823	138.084	1.00	50.02
15		ATOM 5238 CD	GLU D 145	45.061	28.474	138.903	1.00	86.21
		ATOM 5239 OE1	GLU D 145	43.999	29.082	138.644	1.00	106.65
		ATOM 5240 OE2	GLU D 145	45.151	27.610	139.810	1.00	97.00
		ATOM 5241 N	GLN D 146	49.587	26.805	138.142	1.00	18.76
		ATOM 5242 CA	GLN D 146	50.613	26.417	137.184	1.00	16.53
20		ATOM 5243 C	GLN D 146	50.048	25.831	135.891	1.00	13.64
		ATOM 5244 O	GLN D 146	48.859	25.482	135.823	1.00	24.06
		ATOM 5245 CB	GLN D 146	51.596	25.436	137.845	1.00	16.61
		ATOM 5246 CG	GLN D 146	52.397	26.051	139.001	1.00	26.94
		ATOM 5247 CD	GLN D 146	52.982	25.028	139.970	1.00	20.33
25		ATOM 5248 OE1	GLN D 146	53.952	24.342	139.663	1.00	36.10

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	ATOM 5249	NE2	GLN	D	146	52.403	24.947	141.158	1.00	49.07
	ATOM 5250	N	GLU	D	147	50.917	25.735	134.883	1.00	8.09
	ATOM 5251	CA	GLU	D	147	50.607	25.214	133.554	1.00	9.01
	ATOM 5252	C	GLU	D	147	51.763	24.259	133.284	1.00	9.60
5	ATOM 5253	O	GLU	D	147	52.913	24.602	133.583	1.00	16.76
	ATOM 5254	CB	GLU	D	147	50.649	26.387	132.580	1.00	18.20
	ATOM 5255	CG	GLU	D	147	50.323	26.113	131.140	1.00	43.90
	ATOM 5256	CD	GLU	D	147	50.487	27.378	130.327	1.00	60.33
	ATOM 5257	OE1	GLU	D	147	49.536	28.191	130.298	1.00	69.15
10	ATOM 5258	OE2	GLU	D	147	51.584	27.587	129.760	1.00	73.96
	ATOM 5259	N	CYS	D	148	51.496	23.099	132.692	1.00	2.00
	ATOM 5260	CA	CYS	D	148	52.566	22.148	132.460	1.00	6.32
	ATOM 5261	C	CYS	D	148	52.631	21.579	131.064	1.00	10.02
	ATOM 5262	O	CYS	D	148	51.663	21.628	130.328	1.00	19.76
15	ATOM 5263	CB	CYS	D	148	52.437	20.989	133.439	1.00	17.00
	ATOM 5264	SG	CYS	D	148	52.152	21.538	135.131	1.00	26.59
	ATOM 5265	N	GLU	D	149	53.802	21.039	130.730	1.00	6.23
	ATOM 5266	CA	GLU	D	149	54.092	20.376	129.461	1.00	5.34
	ATOM 5267	C	GLU	D	149	54.453	18.955	129.897	1.00	8.80
20	ATOM 5268	O	GLU	D	149	55.070	18.769	130.937	1.00	11.93
	ATOM 5269	CB	GLU	D	149	55.318	20.997	128.749	1.00	2.00
	ATOM 5270	CG	GLU	D	149	55.098	22.410	128.206	1.00	9.83
	ATOM 5271	CD	GLU	D	149	56.338	23.038	127.556	1.00	16.04
	ATOM 5272	OE1	GLU	D	149	56.222	24.163	127.027	1.00	31.77
25	ATOM 5273	OE2	GLU	D	149	57.426	22.427	127.568	1.00	24.64

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	ATOM 5274 N	LEU D 150	54.010	17.962	129.140	1.00	5.84
	ATOM 5275 CA	LEU D 150	54.307	16.567	129.399	1.00	2.00
	ATOM 5276 C	LEU D 150	54.984	16.124	128.139	1.00	2.00
	ATOM 5277 O	LEU D 150	54.531	16.483	127.070	1.00	17.99
5	ATOM 5278 CB	LEU D 150	53.010	15.798	129.523	1.00	6.96
	ATOM 5279 CG	LEU D 150	53.025	14.279	129.391	1.00	11.79
	ATOM 5280 CD1	LEU D 150	53.599	13.694	130.638	1.00	7.72
	ATOM 5281 CD2	LEU D 150	51.617	13.750	129.190	1.00	4.36
	ATOM 5282 N	ARG D 151	56.108	15.438	128.225	1.00	6.84
10	ATOM 5283 CA	ARG D 151	56.733	14.971	127.000	1.00	5.21
	ATOM 5284 C	ARG D 151	56.871	13.478	127.079	1.00	11.96
	ATOM 5285 O	ARG D 151	57.127	12.945	128.162	1.00	14.36
	ATOM 5286 CB	ARG D 151	58.075	15.647	126.717	1.00	2.32
	ATOM 5287 CG	ARG D 151	59.192	15.430	127.705	1.00	2.00
15	ATOM 5288 CD	ARG D 151	60.472	16.011	127.139	1.00	2.00
	ATOM 5289 NE	ARG D 151	61.628	15.858	128.006	1.00	2.00
	ATOM 5290 CZ	ARG D 151	62.778	16.516	127.846	1.00	12.26
	ATOM 5291 NH1	ARG D 151	62.917	17.356	126.862	1.00	19.34
	ATOM 5292 NH2	ARG D 151	63.802	16.392	128.665	1.00	2.00
20	ATOM 5293 N	TYR D 152	56.608	12.810	125.955	1.00	16.95
	ATOM 5294 CA	TYR D 152	56.690	11.356	125.875	1.00	18.36
	ATOM 5295 C	TYR D 152	57.339	10.823	124.613	1.00	22.10
	ATOM 5296 O	TYR D 152	57.191	11.411	123.545	1.00	32.04
	ATOM 5297 CB	TYR D 152	55.301	10.740	126.018	1.00	9.71
25	ATOM 5298 CG	TYR D 152	54.302	11.079	124.929	1.00	14.85

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		ATOM	5299	CD1	TYR	D	152	53.321	12.041	125.141	1.00	26.17
		ATOM	5300	CD2	TYR	D	152	54.261	10.355	123.742	1.00	17.74
		ATOM	5301	CE1	TYR	D	152	52.320	12.263	124.208	1.00	32.40
		ATOM	5302	CE2	TYR	D	152	53.264	10.572	122.799	1.00	32.03
5		ATOM	5303	CZ	TYR	D	152	52.297	11.526	123.042	1.00	35.01
		ATOM	5304	OH	TYR	D	152	51.309	11.740	122.113	1.00	41.10
		ATOM	5305	N	GLN	D	153	58.057	9.709	124.741	1.00	24.67
		ATOM	5306	CA	GLN	D	153	58.704	9.088	123.598	1.00	28.79
		ATOM	5307	C	GLN	D	153	58.819	7.594	123.732	1.00	27.33
10		ATOM	5308	O	GLN	D	153	58.922	7.067	124.831	1.00	34.84
		ATOM	5309	CB	GLN	D	153	60.095	9.668	123.359	1.00	13.25
		ATOM	5310	CG	GLN	D	153	61.171	9.156	124.246	1.00	7.70
		ATOM	5311	CD	GLN	D	153	62.544	9.736	123.884	1.00	15.80
		ATOM	5312	OE1	GLN	D	153	63.541	9.507	124.570	1.00	29.13
15		ATOM	5313	NE2	GLN	D	153	62.602	10.470	122.793	1.00	27.00
		ATOM	5314	N	PRO	D	154	58.683	6.876	122.616	1.00	27.71
		ATOM	5315	CA	PRO	D	154	58.808	5.433	122.712	1.00	22.07
		ATOM	5316	C	PRO	D	154	60.288	5.292	122.965	1.00	17.82
		ATOM	5317	O	PRO	D	154	61.077	6.083	122.460	1.00	24.04
20		ATOM	5318	CB	PRO	D	154	58.426	4.987	121.314	1.00	19.56
		ATOM	5319	CG	PRO	D	154	58.955	6.094	120.467	1.00	16.45
		ATOM	5320	CD	PRO	D	154	58.501	7.296	121.218	1.00	28.87
		ATOM	5321	N	GLN	D	155	60.672	4.405	123.854	1.00	20.73
		ATOM	5322	CA	GLN	D	155	62.088	4.268	124.108	1.00	35.19
25		ATOM	5323	C	GLN	D	155	62.761	3.479	122.979	1.00	41.15

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	ATOM 5324 O	GLN D 155	62.728	2.245	122.971	1.00	51.16
	ATOM 5325 CB	GLN D 155	62.313	3.622	125.468	1.00	22.36
	ATOM 5326 CG	GLN D 155	63.628	4.051	126.113	1.00	40.80
	ATOM 5327 CD	GLN D 155	63.778	3.582	127.555	1.00	41.44
5	ATOM 5328 OE1	GLN D 155	64.784	3.886	128.218	1.00	32.80
	ATOM 5329 NE2	GLN D 155	62.782	2.848	128.052	1.00	26.83
	ATOM 5330 N	LEU D 156	63.304	4.204	121.998	1.00	40.11
	ATOM 5331 CA	LEU D 156	63.991	3.609	120.840	1.00	34.09
	ATOM 5332 C	LEU D 156	65.314	4.336	120.583	1.00	38.39
10	ATOM 5333 O	LEU D 156	65.633	5.315	121.266	1.00	45.76
	ATOM 5334 CB	LEU D 156	63.108	3.642	119.587	1.00	17.25
	ATOM 5335 CG	LEU D 156	61.721	2.992	119.700	1.00	28.12
	ATOM 5336 CD1	LEU D 156	60.932	3.247	118.447	1.00	34.34
	ATOM 5337 CD2	LEU D 156	61.830	1.504	119.937	1.00	41.26
15	ATOM 5338 N	LYS D 157	66.079	3.857	119.607	1.00	42.95
	ATOM 5339 CA	LYS D 157	67.382	4.436	119.298	1.00	49.83
	ATOM 5340 C	LYS D 157	67.334	5.871	118.766	1.00	49.91
	ATOM 5341 O	LYS D 157	68.329	6.599	118.833	1.00	47.92
	ATOM 5342 CB	LYS D 157	68.128	3.510	118.346	1.00	61.48
20	ATOM 5343 CG	LYS D 157	69.639	3.641	118.393	1.00	80.90
	ATOM 5344 CD	LYS D 157	70.309	2.476	117.662	1.00	97.42
	ATOM 5345 CE	LYS D 157	69.789	2.324	116.229	1.00	106.29
	ATOM 5346 NZ	LYS D 157	70.376	1.144	115.532	1.00	105.73
	ATOM 5347 N	GLY D 158	66.170	6.271	118.254	1.00	57.82
25	ATOM 5348 CA	GLY D 158	65.972	7.625	117.744	1.00	65.19

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	ATOM	5349	C	GLY	D	158	65.123	8.455	118.703	1.00	66.54
	ATOM	5350	O	GLY	D	158	63.889	8.471	118.631	1.00	57.60
	ATOM	5351	N	ALA	D	159	65.792	9.159	119.607	1.00	71.96
	ATOM	5352	CA	ALA	D	159	65.113	9.973	120.613	1.00	77.99
5	ATOM	5353	C	ALA	D	159	64.213	11.116	120.091	1.00	75.28
	ATOM	5354	O	ALA	D	159	64.649	12.273	120.019	1.00	85.57
	ATOM	5355	CB	ALA	D	159	66.152	10.522	121.619	1.00	82.87
	ATOM	5356	N	ASN	D	160	62.954	10.814	119.770	1.00	58.78
	ATOM	5357	CA	ASN	D	160	62.053	11.864	119.290	1.00	50.33
10	ATOM	5358	C	ASN	D	160	60.932	12.201	120.279	1.00	39.95
	ATOM	5359	O	ASN	D	160	59.996	11.406	120.490	1.00	31.38
	ATOM	5360	CB	ASN	D	160	61.465	11.506	117.915	1.00	74.65
	ATOM	5361	CG	ASN	D	160	61.472	12.693	116.938	1.00	80.00
	ATOM	5362	OD1	ASN	D	160	62.265	13.631	117.079	1.00	79.98
15	ATOM	5363	ND2	ASN	D	160	60.599	12.638	115.932	1.00	72.31
	ATOM	5364	N	TRP	D	161	61.029	13.401	120.859	1.00	30.32
	ATOM	5365	CA	TRP	D	161	60.058	13.909	121.838	1.00	14.81
	ATOM	5366	C	TRP	D	161	58.718	14.411	121.267	1.00	21.97
	ATOM	5367	O	TRP	D	161	58.685	15.260	120.361	1.00	31.28
20	ATOM	5368	CB	TRP	D	161	60.697	15.024	122.661	1.00	14.53
	ATOM	5369	CG	TRP	D	161	61.616	14.555	123.786	1.00	5.05
	ATOM	5370	CD1	TRP	D	161	62.911	14.965	124.037	1.00	2.00
	ATOM	5371	CD2	TRP	D	161	61.291	13.627	124.813	1.00	8.15
	ATOM	5372	NE1	TRP	D	161	63.394	14.349	125.155	1.00	6.49
25	ATOM	5373	CE2	TRP	D	161	62.420	13.522	125.655	1.00	6.77

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		ATOM	5374	CE3	TRP	D	161	60.147	12.867	125.110	1.00	29.61
		ATOM	5375	CZ2	TRP	D	161	62.439	12.690	126.775	1.00	2.00
		ATOM	5376	CZ3	TRP	D	161	60.166	12.036	126.222	1.00	21.29
		ATOM	5377	CH2	TRP	D	161	61.306	11.957	127.042	1.00	3.35
5		ATOM	5378	N	THR	D	162	57.628	13.877	121.816	1.00	15.25
		ATOM	5379	CA	THR	D	162	56.273	14.244	121.433	1.00	11.71
		ATOM	5380	C	THR	D	162	55.704	15.019	122.612	1.00	20.65
		ATOM	5381	O	THR	D	162	55.720	14.524	123.748	1.00	18.86
		ATOM	5382	CB	THR	D	162	55.418	13.020	121.225	1.00	18.21
10		ATOM	5383	OG1	THR	D	162	55.931	12.264	120.121	1.00	43.48
		ATOM	5384	CG2	THR	D	162	53.972	13.418	120.995	1.00	19.70
		ATOM	5385	N	LEU	D	163	55.170	16.210	122.339	1.00	23.47
		ATOM	5386	CA	LEU	D	163	54.626	17.054	123.388	1.00	10.86
		ATOM	5387	C	LEU	D	163	53.144	17.309	123.489	1.00	13.96
15		ATOM	5388	O	LEU	D	163	52.421	17.293	122.495	1.00	26.00
		ATOM	5389	CB	LEU	D	163	55.302	18.398	123.369	1.00	2.00
		ATOM	5390	CG	LEU	D	163	56.720	18.333	123.871	1.00	14.44
		ATOM	5391	CD1	LEU	D	163	57.616	18.493	122.667	1.00	26.33
		ATOM	5392	CD2	LEU	D	163	56.959	19.399	124.935	1.00	2.00
20		ATOM	5393	N	VAL	D	164	52.722	17.563	124.725	1.00	6.73
		ATOM	5394	CA	VAL	D	164	51.351	17.911	125.077	1.00	10.87
		ATOM	5395	C	VAL	D	164	51.545	19.195	125.886	1.00	15.16
		ATOM	5396	O	VAL	D	164	52.305	19.210	126.846	1.00	19.72
		ATOM	5397	CB	VAL	D	164	50.693	16.857	125.954	1.00	12.54
25		ATOM	5398	CG1	VAL	D	164	49.273	17.256	126.286	1.00	6.90

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		ATOM	5399	CG2	VAL	D	164	50.710	15.533	125.258	1.00	19.88
		ATOM	5400	N	PHE	D	165	50.921	20.281	125.444	1.00	16.41
		ATOM	5401	CA	PHE	D	165	51.081	21.569	126.077	1.00	2.74
		ATOM	5402	C	PHE	D	165	49.885	22.045	126.866	1.00	9.30
5		ATOM	5403	O	PHE	D	165	48.793	21.531	126.735	1.00	10.01
		ATOM	5404	CB	PHE	D	165	51.375	22.612	125.017	1.00	2.00
		ATOM	5405	CG	PHE	D	165	52.559	22.301	124.152	1.00	2.00
		ATOM	5406	CD1	PHE	D	165	52.411	21.779	122.920	1.00	2.00
		ATOM	5407	CD2	PHE	D	165	53.811	22.651	124.522	1.00	3.32
10		ATOM	5408	CE1	PHE	D	165	53.500	21.625	122.068	1.00	3.28
		ATOM	5409	CE2	PHE	D	165	54.896	22.489	123.660	1.00	2.00
		ATOM	5410	CZ	PHE	D	165	54.731	21.984	122.442	1.00	2.00
		ATOM	5411	N	HIS	D	166	50.116	23.057	127.689	1.00	12.57
		ATOM	5412	CA	HIS	D	166	49.063	23.663	128.474	1.00	13.80
15		ATOM	5413	C	HIS	D	166	48.232	22.710	129.303	1.00	13.19
		ATOM	5414	O	HIS	D	166	47.008	22.813	129.375	1.00	26.34
		ATOM	5415	CB	HIS	D	166	48.175	24.494	127.562	1.00	15.55
		ATOM	5416	CG	HIS	D	166	48.937	25.505	126.762	1.00	27.85
		ATOM	5417	ND1	HIS	D	166	49.375	26.699	127.293	1.00	29.86
20		ATOM	5418	CD2	HIS	D	166	49.349	25.491	125.474	1.00	8.89
		ATOM	5419	CE1	HIS	D	166	50.025	27.378	126.365	1.00	21.24
		ATOM	5420	NE2	HIS	D	166	50.021	26.666	125.254	1.00	8.57
		ATOM	5421	N	LEU	D	167	48.908	21.798	129.971	1.00	15.94
		ATOM	5422	CA	LEU	D	167	48.225	20.859	130.835	1.00	19.22
25		ATOM	5423	C	LEU	D	167	48.076	21.493	132.194	1.00	16.03

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		ATOM 5424 O	LEU D 167	48.878	22.328	132.595	1.00	25.48
		ATOM 5425 CB	LEU D 167	49.031	19.578	130.999	1.00	14.52
		ATOM 5426 CG	LEU D 167	48.968	18.514	129.919	1.00	7.97
		ATOM 5427 CD1	LEU D 167	50.005	17.505	130.229	1.00	2.00
5		ATOM 5428 CD2	LEU D 167	47.594	17.869	129.847	1.00	2.00
		ATOM 5429 N	PRO D 168	47.035	21.103	132.919	1.00	16.27
		ATOM 5430 CA	PRO D 168	46.747	21.608	134.260	1.00	16.21
		ATOM 5431 C	PRO D 168	47.801	21.157	135.263	1.00	20.81
		ATOM 5432 O	PRO D 168	48.521	20.186	135.056	1.00	22.37
10		ATOM 5433 CB	PRO D 168	45.390	20.989	134.570	1.00	18.35
		ATOM 5434 CG	PRO D 168	45.382	19.732	133.729	1.00	31.85
		ATOM 5435 CD	PRO D 168	45.965	20.208	132.449	1.00	31.45
		ATOM 5436 N	SER D 169	47.836	21.838	136.389	1.00	24.63
		ATOM 5437 CA	SER D 169	48.799	21.549	137.428	1.00	17.97
15		ATOM 5438 C	SER D 169	48.612	20.171	138.042	1.00	18.27
		ATOM 5439 O	SER D 169	49.534	19.627	138.639	1.00	24.76
		ATOM 5440 CB	SER D 169	48.668	22.607	138.506	1.00	28.52
		ATOM 5441 OG	SER D 169	49.857	22.697	139.249	1.00	51.58
		ATOM 5442 N	SER D 170	47.394	19.648	137.990	1.00	18.84
20		ATOM 5443 CA	SER D 170	47.107	18.331	138.539	1.00	12.65
		ATOM 5444 C	SER D 170	45.969	17.676	137.771	1.00	14.96
		ATOM 5445 O	SER D 170	45.098	18.348	137.211	1.00	24.39
		ATOM 5446 CB	SER D 170	46.773	18.412	140.030	1.00	3.23
		ATOM 5447 OG	SER D 170	45.552	19.085	140.251	1.00	25.30
25		ATOM 5448 N	LYS D 171	46.014	16.356	137.712	1.00	19.65

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	ATOM 5449 CA	LYS D 171	45.009	15.573	137.021	1.00	20.58
	ATOM 5450 C	LYS D 171	44.873	14.290	137.828	1.00	29.24
	ATOM 5451 O	LYS D 171	45.893	13.725	138.239	1.00	23.00
	ATOM 5452 CB	LYS D 171	45.482	15.273	135.591	1.00	24.62
5	ATOM 5453 CG	LYS D 171	44.879	16.168	134.520	1.00	21.62
	ATOM 5454 CD	LYS D 171	43.466	15.722	134.206	1.00	36.44
	ATOM 5455 CE	LYS D 171	42.679	16.767	133.429	1.00	43.24
	ATOM 5456 NZ	LYS D 171	41.195	16.540	133.524	1.00	60.30
	ATOM 5457 N	ASP D 172	43.631	13.891	138.127	1.00	38.21
10	ATOM 5458 CA	ASP D 172	43.361	12.664	138.883	1.00	51.10
	ATOM 5459 C	ASP D 172	43.670	11.467	138.000	1.00	49.94
	ATOM 5460 O	ASP D 172	44.337	10.526	138.421	1.00	57.05
	ATOM 5461 CB	ASP D 172	41.903	12.608	139.345	1.00	70.78
	ATOM 5462 CG	ASP D 172	41.604	13.599	140.452	1.00	91.24
15	ATOM 5463 OD1	ASP D 172	42.470	13.786	141.338	1.00	102.19
	ATOM 5464 OD2	ASP D 172	40.501	14.186	140.438	1.00	97.73
	ATOM 5465 N	GLN D 173	43.167	11.507	136.775	1.00	45.74
	ATOM 5466 CA	GLN D 173	43.418	10.459	135.810	1.00	39.67
	ATOM 5467 C	GLN D 173	43.436	11.110	134.437	1.00	37.13
20	ATOM 5468 O	GLN D 173	42.543	11.874	134.080	1.00	43.88
	ATOM 5469 CB	GLN D 173	42.363	9.358	135.895	1.00	48.70
	ATOM 5470 CG	GLN D 173	40.954	9.761	135.561	1.00	72.37
	ATOM 5471 CD	GLN D 173	40.277	8.716	134.711	1.00	82.96
	ATOM 5472 OE1	GLN D 173	39.423	7.979	135.188	1.00	89.06
25	ATOM 5473 NE2	GLN D 173	40.676	8.628	133.446	1.00	84.33

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	ATOM 5474 N	PHE D 174	44.500	10.865	133.697	1.00	34.62
	ATOM 5475 CA	PHE D 174	44.653	11.429	132.374	1.00	26.88
	ATOM 5476 C	PHE D 174	45.004	10.284	131.461	1.00	34.17
	ATOM 5477 O	PHE D 174	46.064	9.679	131.585	1.00	36.96
5	ATOM 5478 CB	PHE D 174	45.783	12.449	132.388	1.00	27.56
	ATOM 5479 CG	PHE D 174	46.216	12.900	131.023	1.00	15.20
	ATOM 5480 CD1	PHE D 174	45.472	13.831	130.318	1.00	17.57
	ATOM 5481 CD2	PHE D 174	47.395	12.426	130.465	1.00	18.44
	ATOM 5482 CE1	PHE D 174	45.891	14.284	129.087	1.00	14.30
10	ATOM 5483 CE2	PHE D 174	47.833	12.875	129.228	1.00	8.34
	ATOM 5484 CZ	PHE D 174	47.077	13.808	128.537	1.00	18.99
	ATOM 5485 N	GLU D 175	44.092	9.965	130.561	1.00	47.64
	ATOM 5486 CA	GLU D 175	44.302	8.879	129.626	1.00	52.31
	ATOM 5487 C	GLU D 175	45.064	9.360	128.391	1.00	48.25
15	ATOM 5488 O	GLU D 175	44.632	10.278	127.685	1.00	56.42
	ATOM 5489 CB	GLU D 175	42.955	8.285	129.235	1.00	65.58
	ATOM 5490 CG	GLU D 175	43.027	7.065	128.341	1.00	82.51
	ATOM 5491 CD	GLU D 175	41.648	6.584	127.934	1.00	94.58
	ATOM 5492 OE1	GLU D 175	40.849	6.250	128.838	1.00	99.12
20	ATOM 5493 OE2	GLU D 175	41.356	6.557	126.716	1.00	101.84
	ATOM 5494 N	LEU D 176	46.223	8.768	128.167	1.00	32.59
	ATOM 5495 CA	LEU D 176	47.038	9.118	127.026	1.00	36.19
	ATOM 5496 C	LEU D 176	47.078	7.902	126.132	1.00	44.43
	ATOM 5497 O	LEU D 176	47.275	6.789	126.612	1.00	47.77
25	ATOM 5498 CB	LEU D 176	48.453	9.470	127.482	1.00	35.67

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		ATOM	5499	CG	LEU	D	176	49.518	9.681	126.403	1.00	25.29
		ATOM	5500	CD1	LEU	D	176	49.238	10.947	125.611	1.00	32.02
		ATOM	5501	CD2	LEU	D	176	50.861	9.750	127.050	1.00	15.91
		ATOM	5502	N	CYS	D	177	46.943	8.116	124.832	1.00	57.69
5		ATOM	5503	CA	CYS	D	177	46.962	7.002	123.907	1.00	60.99
		ATOM	5504	C	CYS	D	177	47.669	7.311	122.597	1.00	53.70
		ATOM	5505	O	CYS	D	177	48.069	8.446	122.339	1.00	55.28
		ATOM	5506	CB	CYS	D	177	45.537	6.507	123.664	1.00	68.57
		ATOM	5507	SG	CYS	D	177	45.327	4.708	123.904	1.00	97.42
10		ATOM	5508	N	GLY	D	178	47.805	6.283	121.771	1.00	50.29
		ATOM	5509	CA	GLY	D	178	48.484	6.431	120.501	1.00	56.37
		ATOM	5510	C	GLY	D	178	49.899	5.951	120.720	1.00	60.13
		ATOM	5511	O	GLY	D	178	50.816	6.268	119.961	1.00	66.23
		ATOM	5512	N	LEU	D	179	50.051	5.085	121.716	1.00	62.63
15		ATOM	5513	CA	LEU	D	179	51.355	4.569	122.078	1.00	60.51
		ATOM	5514	C	LEU	D	179	51.615	3.123	121.705	1.00	57.70
		ATOM	5515	O	LEU	D	179	51.333	2.190	122.465	1.00	55.26
		ATOM	5516	CB	LEU	D	179	51.588	4.797	123.568	1.00	64.95
		ATOM	5517	CG	LEU	D	179	51.287	6.246	123.976	1.00	58.96
20		ATOM	5518	CD1	LEU	D	179	51.051	6.355	125.471	1.00	48.37
		ATOM	5519	CD2	LEU	D	179	52.405	7.160	123.509	1.00	41.57
		ATOM	5520	N	HIS	D	180	52.086	2.958	120.478	1.00	51.98
		ATOM	5521	CA	HIS	D	180	52.461	1.662	119.938	1.00	55.92
		ATOM	5522	C	HIS	D	180	53.509	1.949	118.875	1.00	51.94
25		ATOM	5523	O	HIS	D	180	53.169	2.198	117.726	1.00	70.36

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		ATOM 5524 CB HIS D 180 51.271	0.863	119.361	1.00	58.70
		ATOM 5525 CG HIS D 180 50.075	1.688	118.989	1.00	69.97
		ATOM 5526 ND1 HIS D 180 50.153	2.809	118.190	1.00	74.34
		ATOM 5527 CD2 HIS D 180 48.758	1.514	119.264	1.00	74.54
5		ATOM 5528 CE1 HIS D 180 48.937	3.288	117.985	1.00	79.55
		ATOM 5529 NE2 HIS D 180 48.073	2.520	118.626	1.00	76.28
		ATOM 5530 N GLN D 181 54.767	2.020	119.304	1.00	40.78
		ATOM 5531 CA GLN D 181 55.918	2.309	118.438	1.00	43.20
		ATOM 5532 C GLN D 181 57.131	1.714	119.180	1.00	43.91
10		ATOM 5533 O GLN D 181 58.277	1.701	118.694	1.00	41.30
		ATOM 5534 CB GLN D 181 56.053	3.843	118.266	1.00	50.71
		ATOM 5535 CG GLN D 181 56.863	4.346	117.047	1.00	76.75
		ATOM 5536 CD GLN D 181 56.790	5.876	116.843	1.00	89.52
		ATOM 5537 OE1 GLN D 181 56.451	6.628	117.761	1.00	97.77
15		ATOM 5538 NE2 GLN D 181 57.111	6.331	115.631	1.00	98.43
		ATOM 5539 N ALA D 182 56.829	1.174	120.354	1.00	38.49
		ATOM 5540 CA ALA D 182 57.798	0.562	121.234	1.00	36.75
		ATOM 5541 C ALA D 182 56.991	-0.017	122.391	1.00	43.17
		ATOM 5542 O ALA D 182 55.838	0.386	122.616	1.00	46.03
20		ATOM 5543 CB ALA D 182 58.779	1.592	121.725	1.00	36.35
		ATOM 5544 N PRO D 183 57.553	-1.016	123.103	1.00	48.44
		ATOM 5545 CA PRO D 183 56.832	-1.623	124.226	1.00	47.75
		ATOM 5546 C PRO D 183 56.834	-0.726	125.457	1.00	44.12
		ATOM 5547 O PRO D 183 55.904	-0.773	126.253	1.00	45.49
25		ATOM 5548 CB PRO D 183 57.602	-2.921	124.457	1.00	47.49

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	ATOM	5549	CG	PRO	D	183	59.011	-2.512	124.165	1.00	48.56
	ATOM	5550	CD	PRO	D	183	58.877	-1.646	122.925	1.00	50.30
	ATOM	5551	N	VAL	D	184	57.861	0.113	125.588	1.00	37.53
	ATOM	5552	CA	VAL	D	184	57.973	1.018	126.723	1.00	30.22
5	ATOM	5553	C	VAL	D	184	58.275	2.475	126.357	1.00	34.00
	ATOM	5554	O	VAL	D	184	59.100	2.760	125.473	1.00	27.46
	ATOM	5555	CB	VAL	D	184	58.984	0.471	127.740	1.00	28.37
	ATOM	5556	CG1	VAL	D	184	59.606	1.579	128.568	1.00	18.10
	ATOM	5557	CG2	VAL	D	184	58.272	-0.502	128.650	1.00	33.74
10	ATOM	5558	N	TYR	D	185	57.603	3.387	127.059	1.00	27.36
	ATOM	5559	CA	TYR	D	185	57.759	4.817	126.845	1.00	19.66
	ATOM	5560	C	TYR	D	185	58.310	5.553	128.062	1.00	15.88
	ATOM	5561	O	TYR	D	185	58.104	5.129	129.192	1.00	31.02
	ATOM	5562	CB	TYR	D	185	56.408	5.418	126.500	1.00	26.81
15	ATOM	5563	CG	TYR	D	185	55.983	5.187	125.080	1.00	41.90
	ATOM	5564	CD1	TYR	D	185	55.522	3.944	124.659	1.00	51.56
	ATOM	5565	CD2	TYR	D	185	56.023	6.219	124.155	1.00	42.28
	ATOM	5566	CE1	TYR	D	185	55.108	3.741	123.345	1.00	58.06
	ATOM	5567	CE2	TYR	D	185	55.614	6.026	122.842	1.00	51.26
20	ATOM	5568	CZ	TYR	D	185	55.156	4.792	122.446	1.00	51.30
	ATOM	5569	OH	TYR	D	185	54.729	4.619	121.158	1.00	58.76
	ATOM	5570	N	THR	D	186	59.059	6.622	127.821	1.00	9.56
	ATOM	5571	CA	THR	D	186	59.585	7.480	128.884	1.00	10.30
	ATOM	5572	C	THR	D	186	58.700	8.722	128.957	1.00	16.91
25	ATOM	5573	O	THR	D	186	58.346	9.286	127.932	1.00	25.74

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	ATOM	5574	CB	THR	D	186	60.954	8.027	128.557	1.00	2.27
	ATOM	5575	OG1	THR	D	186	61.872	6.951	128.346	1.00	26.79
	ATOM	5576	CG2	THR	D	186	61.442	8.896	129.685	1.00	8.69
	ATOM	5577	N	LEU	D	187	58.368	9.178	130.154	1.00	18.77
5	ATOM	5578	CA	LEU	D	187	57.540	10.357	130.269	1.00	11.59
	ATOM	5579	C	LEU	D	187	58.128	11.276	131.293	1.00	6.28
	ATOM	5580	O	LEU	D	187	58.710	10.818	132.264	1.00	19.05
	ATOM	5581	CB	LEU	D	187	56.121	9.991	130.682	1.00	2.00
	ATOM	5582	CG	LEU	D	187	55.319	9.124	129.716	1.00	5.69
10	ATOM	5583	CD1	LEU	D	187	55.752	7.688	129.826	1.00	17.09
	ATOM	5584	CD2	LEU	D	187	53.844	9.234	130.051	1.00	2.00
	ATOM	5585	N	GLN	D	188	58.041	12.571	131.026	1.00	3.65
	ATOM	5586	CA	GLN	D	188	58.506	13.593	131.947	1.00	2.50
	ATOM	5587	C	GLN	D	188	57.521	14.741	131.889	1.00	10.85
15	ATOM	5588	O	GLN	D	188	56.766	14.877	130.929	1.00	21.81
	ATOM	5589	CB	GLN	D	188	59.889	14.077	131.591	1.00	2.00
	ATOM	5590	CG	GLN	D	188	60.944	13.053	131.835	1.00	6.61
	ATOM	5591	CD	GLN	D	188	62.339	13.541	131.487	1.00	17.80
	ATOM	5592	OE1	GLN	D	188	62.659	13.737	130.325	1.00	35.21
20	ATOM	5593	NE2	GLN	D	188	63.179	13.725	132.495	1.00	30.13
	ATOM	5594	N	MET	D	189	57.520	15.561	132.922	1.00	8.46
	ATOM	5595	CA	MET	D	189	56.611	16.682	132.979	1.00	2.44
	ATOM	5596	C	MET	D	189	57.331	17.796	133.693	1.00	2.84
	ATOM	5597	O	MET	D	189	58.212	17.522	134.488	1.00	17.28
25	ATOM	5598	CB	MET	D	189	55.362	16.278	133.751	1.00	2.00

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		ATOM	5599	CG	MET	D	189	54.273	17.277	133.688	1.00	10.98
		ATOM	5600	SD	MET	D	189	52.793	16.641	134.391	1.00	19.99
		ATOM	5601	CE	MET	D	189	52.361	15.503	133.155	1.00	34.80
		ATOM	5602	N	ARG	D	190	57.039	19.044	133.336	1.00	2.00
5		ATOM	5603	CA	ARG	D	190	57.668	20.203	133.972	1.00	2.00
		ATOM	5604	C	ARG	D	190	56.569	21.233	134.045	1.00	5.72
		ATOM	5605	O	ARG	D	190	55.614	21.165	133.264	1.00	8.90
		ATOM	5606	CB	ARG	D	190	58.850	20.729	133.146	1.00	2.00
		ATOM	5607	CG	ARG	D	190	58.500	21.824	132.183	1.00	2.00
10		ATOM	5608	CD	ARG	D	190	59.178	21.711	130.848	1.00	2.13
		ATOM	5609	NE	ARG	D	190	60.329	22.591	130.663	1.00	14.72
		ATOM	5610	CZ	ARG	D	190	60.544	23.322	129.569	1.00	11.26
		ATOM	5611	NH1	ARG	D	190	59.689	23.298	128.558	1.00	6.33
		ATOM	5612	NH2	ARG	D	190	61.652	24.034	129.463	1.00	15.01
15		ATOM	5613	N	CYS	D	191	56.670	22.163	134.986	1.00	9.62
		ATOM	5614	CA	CYS	D	191	55.638	23.176	135.124	1.00	19.35
		ATOM	5615	C	CYS	D	191	56.183	24.595	135.244	1.00	13.71
		ATOM	5616	O	CYS	D	191	57.374	24.786	135.461	1.00	29.38
		ATOM	5617	CB	CYS	D	191	54.737	22.838	136.315	1.00	19.30
20		ATOM	5618	SG	CYS	D	191	53.891	21.230	136.151	1.00	48.94
		ATOM	5619	N	ILE	D	192	55.314	25.590	135.079	1.00	4.88
		ATOM	5620	CA	ILE	D	192	55.709	26.993	135.177	1.00	6.69
		ATOM	5621	C	ILE	D	192	54.502	27.772	135.698	1.00	13.53
		ATOM	5622	O	ILE	D	192	53.352	27.344	135.489	1.00	17.11
25		ATOM	5623	CB	ILE	D	192	56.159	27.559	133.774	1.00	2.01

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	ATOM 5624	CG1	ILE	D	192	56.956	28.838	133.947	1.00	6.36
	ATOM 5625	CG2	ILE	D	192	54.970	27.801	132.863	1.00	2.95
	ATOM 5626	CD1	ILE	D	192	57.269	29.497	132.684	1.00	2.00
	ATOM 5627	N	ARG	D	193	54.768	28.894	136.374	1.00	7.50
5	ATOM 5628	CA	ARG	D	193	53.724	29.762	136.934	1.00	2.00
	ATOM 5629	C	ARG	D	193	52.851	30.266	135.801	1.00	7.03
	ATOM 5630	O	ARG	D	193	53.353	30.751	134.788	1.00	17.94
	ATOM 5631	CB	ARG	D	193	54.368	30.943	137.648	1.00	9.24
	ATOM 5632	CG	ARG	D	193	53.465	31.829	138.505	1.00	2.00
10	ATOM 5633	CD	ARG	D	193	54.356	32.865	139.123	1.00	2.00
	ATOM 5634	NE	ARG	D	193	53.705	33.670	140.133	1.00	8.22
	ATOM 5635	CZ	ARG	D	193	54.006	34.947	140.368	1.00	10.59
	ATOM 5636	NH1	ARG	D	193	54.932	35.563	139.659	1.00	9.16
	ATOM 5637	NH2	ARG	D	193	53.422	35.608	141.344	1.00	20.90
15	ATOM 5638	N	SER	D	194	51.541	30.170	135.970	1.00	4.50
	ATOM 5639	CA	SER	D	194	50.637	30.605	134.925	1.00	8.93
	ATOM 5640	C	SER	D	194	50.360	32.107	134.925	1.00	14.54
	ATOM 5641	O	SER	D	194	50.066	32.707	135.961	1.00	28.01
	ATOM 5642	CB	SER	D	194	49.320	29.827	134.997	1.00	2.01
20	ATOM 5643	OG	SER	D	194	48.616	29.906	133.768	1.00	33.64
	ATOM 5644	N	SER	D	195	50.524	32.707	133.753	1.00	17.95
	ATOM 5645	CA	SER	D	195	50.252	34.117	133.520	1.00	3.66
	ATOM 5646	C	SER	D	195	51.093	35.152	134.238	1.00	12.22
	ATOM 5647	O	SER	D	195	50.884	36.351	134.070	1.00	35.98
25	ATOM 5648	CB	SER	D	195	48.776	34.392	133.739	1.00	6.54

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5	ATOM 5649	OG	SER D 195	47.957	33.399	133.122	1.00	36.75
	ATOM 5650	N	LEU D 196	52.035	34.723	135.050	1.00	2.00
	ATOM 5651	CA	LEU D 196	52.884	35.697	135.687	1.00	2.00
	ATOM 5652	C	LEU D 196	54.338	35.275	135.545	1.00	2.63
	ATOM 5653	O	LEU D 196	54.638	34.175	135.093	1.00	18.42
10	ATOM 5654	CB	LEU D 196	52.497	35.844	137.132	1.00	2.00
	ATOM 5655	CG	LEU D 196	51.132	36.458	137.366	1.00	2.00
	ATOM 5656	CD1	LEU D 196	50.612	35.996	138.720	1.00	10.59
	ATOM 5657	CD2	LEU D 196	51.263	37.951	137.309	1.00	10.42
	ATOM 5658	N	PRO D 197	55.267	36.178	135.849	1.00	9.21
15	ATOM 5659	CA	PRO D 197	56.695	35.862	135.749	1.00	7.00
	ATOM 5660	C	PRO D 197	57.213	34.677	136.597	1.00	14.45
	ATOM 5661	O	PRO D 197	56.975	34.580	137.812	1.00	26.79
	ATOM 5662	CB	PRO D 197	57.359	37.173	136.173	1.00	2.00
	ATOM 5663	CG	PRO D 197	56.393	38.190	135.714	1.00	11.52
20	ATOM 5664	CD	PRO D 197	55.064	37.613	136.106	1.00	12.58
	ATOM 5665	N	GLY D 198	57.985	33.819	135.940	1.00	19.44
	ATOM 5666	CA	GLY D 198	58.589	32.674	136.593	1.00	19.82
	ATOM 5667	C	GLY D 198	59.384	31.848	135.602	1.00	15.14
	ATOM 5668	O	GLY D 198	59.173	31.936	134.399	1.00	21.51
25	ATOM 5669	N	PHE D 199	60.292	31.034	136.108	1.00	19.39
	ATOM 5670	CA	PHE D 199	61.109	30.189	135.257	1.00	13.36
	ATOM 5671	C	PHE D 199	60.535	28.767	135.225	1.00	13.44
	ATOM 5672	O	PHE D 199	59.900	28.342	136.179	1.00	14.84
	ATOM 5673	CB	PHE D 199	62.513	30.127	135.820	1.00	29.61

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		ATOM 5674	CG	PHE	D	199	63.108	31.457	136.134	1.00	28.54
		ATOM 5675	CD1	PHE	D	199	63.749	32.190	135.146	1.00	26.33
		ATOM 5676	CD2	PHE	D	199	63.095	31.940	137.435	1.00	34.29
		ATOM 5677	CE1	PHE	D	199	64.372	33.369	135.446	1.00	33.06
5		ATOM 5678	CE2	PHE	D	199	63.716	33.128	137.748	1.00	37.59
		ATOM 5679	CZ	PHE	D	199	64.357	33.843	136.755	1.00	41.26
		ATOM 5680	N	TRP	D	200	60.738	28.035	134.131	1.00	18.31
		ATOM 5681	CA	TRP	D	200	60.245	26.661	134.052	1.00	7.23
		ATOM 5682	C	TRP	D	200	60.920	25.860	135.149	1.00	6.85
10		ATOM 5683	O	TRP	D	200	61.999	26.212	135.616	1.00	21.74
		ATOM 5684	CB	TRP	D	200	60.632	26.021	132.720	1.00	7.97
		ATOM 5685	CG	TRP	D	200	59.731	26.289	131.577	1.00	2.00
		ATOM 5686	CD1	TRP	D	200	59.976	27.109	130.545	1.00	2.00
		ATOM 5687	CD2	TRP	D	200	58.431	25.726	131.349	1.00	2.00
15		ATOM 5688	NE1	TRP	D	200	58.909	27.107	129.675	1.00	2.66
		ATOM 5689	CE2	TRP	D	200	57.949	26.264	130.154	1.00	2.00
		ATOM 5690	CE3	TRP	D	200	57.629	24.828	132.051	1.00	2.45
		ATOM 5691	CZ2	TRP	D	200	56.706	25.939	129.639	1.00	9.02
		ATOM 5692	CZ3	TRP	D	200	56.399	24.503	131.546	1.00	2.00
20		ATOM 5693	CH2	TRP	D	200	55.944	25.056	130.352	1.00	5.05
		ATOM 5694	N	SER	D	201	60.277	24.793	135.575	1.00	2.00
		ATOM 5695	CA	SER	D	201	60.854	23.924	136.577	1.00	2.00
		ATOM 5696	C	SER	D	201	61.696	22.934	135.785	1.00	11.49
		ATOM 5697	O	SER	D	201	61.587	22.860	134.553	1.00	21.43
25		ATOM 5698	CB	SER	D	201	59.749	23.127	137.244	1.00	6.49

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	ATOM 5699 OG	SER D 201	59.210	22.167	136.338	1.00	2.43
	ATOM 5700 N	PRO D 202	62.529	22.140	136.466	1.00	6.29
	ATOM 5701 CA	PRO D 202	63.323	21.176	135.713	1.00	2.69
	ATOM 5702 C	PRO D 202	62.342	20.047	135.283	1.00	12.96
5	ATOM 5703 O	PRO D 202	61.232	19.969	135.826	1.00	25.73
	ATOM 5704 CB	PRO D 202	64.295	20.674	136.766	1.00	3.31
	ATOM 5705 CG	PRO D 202	64.340	21.753	137.748	1.00	3.05
	ATOM 5706 CD	PRO D 202	62.931	22.139	137.873	1.00	11.51
	ATOM 5707 N	TRP D 203	62.699	19.212	134.301	1.00	7.48
10	ATOM 5708 CA	TRP D 203	61.798	18.137	133.889	1.00	2.00
	ATOM 5709 C	TRP D 203	61.894	17.076	134.974	1.00	3.67
	ATOM 5710 O	TRP D 203	62.983	16.771	135.470	1.00	15.94
	ATOM 5711 CB	TRP D 203	62.214	17.511	132.545	1.00	2.00
	ATOM 5712 CG	TRP D 203	61.922	18.306	131.296	1.00	2.00
15	ATOM 5713 CD1	TRP D 203	62.805	19.080	130.599	1.00	5.28
	ATOM 5714 CD2	TRP D 203	60.659	18.412	130.593	1.00	2.00
	ATOM 5715 NE1	TRP D 203	62.172	19.666	129.514	1.00	8.04
	ATOM 5716 CE2	TRP D 203	60.861	19.270	129.493	1.00	2.00
	ATOM 5717 CE3	TRP D 203	59.387	17.870	130.797	1.00	3.18
20	ATOM 5718 CZ2	TRP D 203	59.845	19.596	128.609	1.00	2.00
	ATOM 5719 CZ3	TRP D 203	58.375	18.200	129.911	1.00	13.68
	ATOM 5720 CH2	TRP D 203	58.611	19.056	128.832	1.00	5.07
	ATOM 5721 N	SER D 204	60.760	16.510	135.338	1.00	2.00
	ATOM 5722 CA	SER D 204	60.704	15.477	136.350	1.00	2.00
25	ATOM 5723 C	SER D 204	61.508	14.288	135.893	1.00	14.55

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		ATOM 5724 O	SER D 204	61.729	14.127	134.698	1.00	18.04
		ATOM 5725 CB	SER D 204	59.268	15.015	136.502	1.00	6.96
		ATOM 5726 OG	SER D 204	58.786	14.491	135.274	1.00	13.86
		ATOM 5727 N	PRO D 205	62.005	13.466	136.838	1.00	24.77
5		ATOM 5728 CA	PRO D 205	62.777	12.285	136.457	1.00	22.33
		ATOM 5729 C	PRO D 205	61.922	11.379	135.566	1.00	23.63
		ATOM 5730 O	PRO D 205	60.693	11.272	135.720	1.00	22.78
		ATOM 5731 CB	PRO D 205	63.100	11.644	137.808	1.00	27.79
		ATOM 5732 CG	PRO D 205	62.118	12.276	138.777	1.00	16.92
10		ATOM 5733 CD	PRO D 205	62.080	13.672	138.297	1.00	23.46
		ATOM 5734 N	GLY D 206	62.583	10.784	134.589	1.00	18.52
		ATOM 5735 CA	GLY D 206	61.895	9.936	133.649	1.00	14.18
		ATOM 5736 C	GLY D 206	61.109	8.791	134.214	1.00	11.72
		ATOM 5737 O	GLY D 206	61.598	8.039	135.048	1.00	31.14
15		ATOM 5738 N	LEU D 207	59.864	8.702	133.778	1.00	15.24
		ATOM 5739 CA	LEU D 207	58.961	7.636	134.161	1.00	15.15
		ATOM 5740 C	LEU D 207	59.004	6.704	132.974	1.00	17.06
		ATOM 5741 O	LEU D 207	58.821	7.132	131.848	1.00	27.69
		ATOM 5742 CB	LEU D 207	57.536	8.145	134.278	1.00	17.45
20		ATOM 5743 CG	LEU D 207	56.836	8.106	135.626	1.00	14.61
		ATOM 5744 CD1	LEU D 207	55.344	8.163	135.380	1.00	26.14
		ATOM 5745 CD2	LEU D 207	57.184	6.832	136.366	1.00	40.50
		ATOM 5746 N	GLN D 208	59.276	5.439	133.212	1.00	19.31
		ATOM 5747 CA	GLN D 208	59.336	4.477	132.135	1.00	15.29
25		ATOM 5748 C	GLN D 208	58.121	3.591	132.361	1.00	19.37

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		ATOM	5749	O	GLN	D	208	58.054	2.836	133.333	1.00	34.18
		ATOM	5750	CB	GLN	D	208	60.665	3.722	132.209	1.00	14.19
		ATOM	5751	CG	GLN	D	208	61.891	4.660	132.209	1.00	28.06
		ATOM	5752	CD	GLN	D	208	63.228	3.936	132.312	1.00	50.24
5		ATOM	5753	OE1	GLN	D	208	63.352	2.768	131.943	1.00	71.80
		ATOM	5754	NE2	GLN	D	208	64.240	4.637	132.809	1.00	59.32
		ATOM	5755	N	LEU	D	209	57.103	3.797	131.537	1.00	21.30
		ATOM	5756	CA	LEU	D	209	55.862	3.052	131.653	1.00	22.68
		ATOM	5757	C	LEU	D	209	55.564	2.202	130.436	1.00	34.74
10		ATOM	5758	O	LEU	D	209	56.032	2.487	129.325	1.00	33.75
		ATOM	5759	CB	LEU	D	209	54.696	3.998	131.905	1.00	9.98
		ATOM	5760	CG	LEU	D	209	54.786	4.760	133.207	1.00	11.78
		ATOM	5761	CD1	LEU	D	209	53.663	5.743	133.276	1.00	22.97
		ATOM	5762	CD2	LEU	D	209	54.725	3.791	134.361	1.00	21.12
15		ATOM	5763	N	ARG	D	210	54.733	1.185	130.653	1.00	46.45
		ATOM	5764	CA	ARG	D	210	54.344	0.253	129.604	1.00	42.75
		ATOM	5765	C	ARG	D	210	52.877	0.440	129.199	1.00	40.63
		ATOM	5766	O	ARG	D	210	51.959	0.396	130.040	1.00	45.71
		ATOM	5767	CB	ARG	D	210	54.586	-1.192	130.068	1.00	43.28
20		ATOM	5768	CG	ARG	D	210	55.865	-1.403	130.895	1.00	54.69
		ATOM	5769	CD	ARG	D	210	56.136	-2.884	131.181	1.00	60.49
		ATOM	5770	NE	ARG	D	210	56.587	-3.589	129.983	1.00	51.49
		ATOM	5771	CZ	ARG	D	210	57.832	-4.014	129.794	1.00	41.33
		ATOM	5772	NH1	ARG	D	210	58.744	-3.814	130.735	1.00	32.26
25		ATOM	5773	NH2	ARG	D	210	58.175	-4.594	128.649	1.00	35.08

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	ATOM 5774 N	PRO D 211	52.650	0.761	127.921	1.00	37.02
	ATOM 5775 CA	PRO D 211	51.303	0.964	127.373	1.00	42.34
	ATOM 5776 C	PRO D 211	50.534	-0.353	127.415	1.00	50.27
	ATOM 5777 O	PRO D 211	51.092	-1.394	127.079	1.00	54.99
5	ATOM 5778 CB	PRO D 211	51.588	1.377	125.923	1.00	37.46
	ATOM 5779 CG	PRO D 211	52.933	2.063	126.012	1.00	26.89
	ATOM 5780 CD	PRO D 211	53.689	1.170	126.958	1.00	34.48
	ATOM 5781 N	THR D 212	49.276	-0.323	127.838	1.00	59.54
	ATOM 5782 CA	THR D 212	48.469	-1.534	127.895	1.00	78.01
10	ATOM 5783 C	THR D 212	48.515	-2.200	126.511	1.00	95.21
	ATOM 5784 O	THR D 212	48.470	-1.506	125.495	1.00	92.21
	ATOM 5785 CB	THR D 212	47.012	-1.202	128.272	1.00	78.24
	ATOM 5786 OG1	THR D 212	46.980	-0.007	129.066	1.00	88.13
	ATOM 5787 CG2	THR D 212	46.399	-2.331	129.093	1.00	83.23
15	ATOM 5788 N	MET D 213	48.677	-3.525	126.482	1.00	117.65
	ATOM 5789 CA	MET D 213	48.759	-4.297	125.232	1.00	134.27
	ATOM 5790 C	MET D 213	47.406	-4.466	124.524	1.00	139.67
	ATOM 5791 O	MET D 213	46.358	-4.281	125.182	1.00	144.65
	ATOM 5792 CB	MET D 213	49.385	-5.683	125.489	1.00	142.66
20	ATOM 5793 CG	MET D 213	50.834	-5.674	125.990	1.00	154.50
	ATOM 5794 SD	MET D 213	51.530	-7.337	126.277	1.00	164.73
	ATOM 5795 CE	MET D 213	52.854	-7.386	125.068	1.00	169.73
	ATOM 5796 OXT	MET D 213	47.407	-4.792	123.316	1.00	142.48
	ATOM 5797 C1	NAG E 323	70.090	50.934	125.869	1.00	86.35
25	ATOM 5798 C2	NAG E 323	69.687	52.074	126.879	1.00	95.95

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	ATOM 5799 N2	NAG E 323	69.506	51.579	128.237	1.00	113.58
	ATOM 5800 C7	NAG E 323	69.397	52.430	129.263	1.00	123.51
	ATOM 5801 O7	NAG E 323	69.482	53.657	129.146	1.00	128.40
	ATOM 5802 C8	NAG E 323	69.194	51.873	130.662	1.00	127.19
5	ATOM 5803 C3	NAG E 323	68.377	52.740	126.390	1.00	87.65
	ATOM 5804 O3	NAG E 323	67.926	53.774	127.259	1.00	80.45
	ATOM 5805 C4	NAG E 323	68.598	53.314	125.014	1.00	83.97
	ATOM 5806 O4	NAG E 323	67.397	53.948	124.593	1.00	88.59
	ATOM 5807 C5	NAG E 323	68.992	52.176	124.061	1.00	80.66
10	ATOM 5808 O5	NAG E 323	70.194	51.488	124.530	1.00	89.64
	ATOM 5809 C6	NAG E 323	69.286	52.673	122.649	1.00	72.76
	ATOM 5810 O6	NAG E 323	70.352	53.620	122.610	1.00	63.60
	ATOM 5811 C1	NAG F 923	75.428	33.117	134.564	1.00	96.97
	ATOM 5812 C2	NAG F 923	76.117	32.313	133.423	1.00	106.57
15	ATOM 5813 N2	NAG F 923	76.007	33.046	132.166	1.00	112.53
	ATOM 5814 C7	NAG F 923	76.875	34.000	131.830	1.00	108.90
	ATOM 5815 O7	NAG F 923	77.831	34.321	132.533	1.00	106.72
	ATOM 5816 C8	NAG F 923	76.650	34.699	130.500	1.00	103.95
	ATOM 5817 C3	NAG F 923	75.477	30.918	133.239	1.00	107.20
20	ATOM 5818 O3	NAG F 923	76.248	30.129	132.337	1.00	105.41
	ATOM 5819 C4	NAG F 923	75.344	30.186	134.583	1.00	104.89
	ATOM 5820 O4	NAG F 923	74.673	28.944	134.381	1.00	103.53
	ATOM 5821 C5	NAG F 923	74.559	31.090	135.552	1.00	96.62
	ATOM 5822 O5	NAG F 923	75.295	32.319	135.763	1.00	98.73
25	ATOM 5823 C6	NAG F 923	74.230	30.491	136.932	1.00	83.66

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		ATOM 5824	OW	NAG F	923	75.389	30.215	137.715	1.00	70.97
		ATOM 5825	OW	WAT W	1	38.203	36.547	108.852	1.00	32.09
		ATOM 5826	OW	WAT W	2	40.146	35.965	104.253	1.00	25.39
		ATOM 5827	OW	WAT W	3	46.370	26.352	130.324	1.00	38.74
5		ATOM 5828	OW	WAT W	4	54.520	17.773	120.146	1.00	26.41
		ATOM 5829	OW	WAT W	5	46.944	36.226	117.288	1.00	9.42
		ATOM 5830	OW	WAT W	6	47.744	39.445	117.193	1.00	26.80
		ATOM 5831	OW	WAT W	7	53.109	30.567	112.889	1.00	17.60
		ATOM 5832	OW	WAT W	8	56.148	30.252	114.184	1.00	16.85
10		ATOM 5833	OW	WAT W	9	49.677	42.897	98.855	1.00	7.00
		ATOM 5834	OW	WAT W	10	45.438	48.364	96.965	1.00	28.43
		ATOM 5835	OW	WAT W	11	52.252	48.283	93.531	1.00	45.75
		ATOM 5836	OW	WAT W	12	29.958	49.999	86.981	1.00	39.79
		ATOM 5837	OW	WAT W	13	33.057	47.782	88.086	1.00	22.29
15		ATOM 5838	OW	WAT W	14	33.937	45.355	87.050	1.00	20.42
		ATOM 5839	OW	WAT W	15	33.281	32.891	84.290	1.00	29.07
		ATOM 5840	OW	WAT W	16	41.939	29.646	78.106	1.00	53.05
		ATOM 5841	OW	WAT W	17	45.216	11.025	124.909	1.00	66.43
		ATOM 5842	OW	WAT W	18	54.077	53.749	127.102	1.00	21.41
20		ATOM 5843	OW	WAT W	19	52.842	50.564	132.909	1.00	57.49
		ATOM 5844	OW	WAT W	20	66.427	49.747	117.708	1.00	21.98
		ATOM 5845	OW	WAT W	21	64.802	35.926	110.169	1.00	12.51
		ATOM 5846	OW	WAT W	22	42.286	42.624	124.599	1.00	49.11
		ATOM 5847	OW	WAT W	23	49.913	42.882	128.416	1.00	6.51
25		ATOM 5848	OW	WAT W	24	61.455	37.326	120.990	1.00	16.25

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		ATOM	5849	OW	WAT	W	25	67.941	43.747	123.603	1.00	24.88
		ATOM	5850	OW	WAT	W	26	63.310	23.296	132.093	1.00	18.84
		ATOM	5851	OW	WAT	W	27	86.434	60.899	117.903	1.00	20.76
		ATOM	5852	OW	WAT	W	28	56.015	32.112	153.034	1.00	23.28
5		ATOM	5853	OW	WAT	W	29	65.520	11.880	133.930	1.00	30.79
		ATOM	5854	OW	WAT	W	30	55.970	43.368	118.352	1.00	30.91
		ATOM	5855	OW	WAT	W	31	53.076	45.784	121.317	1.00	2.00
		ATOM	5856	OW	WAT	W	32	51.995	47.010	144.158	1.00	29.81
		ATOM	5857	OW	WAT	W	33	58.979	49.996	121.494	1.00	42.97
10		ATOM	5858	OW	WAT	W	34	51.081	17.828	146.174	1.00	31.45
		ATOM	5859	OW	WAT	W	35	55.448	45.693	120.199	1.00	28.62
		ATOM	5860	OW	WAT	W	36	60.927	43.212	149.323	1.00	25.07
		ATOM	5861	OW	WAT	W	37	55.756	28.042	150.696	1.00	37.53
		ATOM	5862	OW	WAT	W	38	46.600	46.811	103.984	1.00	26.88
15		ATOM	5863	OW	WAT	W	39	66.277	27.651	108.242	1.00	23.95
		ATOM	5864	OW	WAT	W	40	41.925	53.908	137.833	1.00	34.79
		ATOM	5865	OW	WAT	W	41	66.567	34.794	138.483	1.00	44.77
		ATOM	5866	OW	WAT	W	42	51.488	28.171	151.053	1.00	31.80
		ATOM	5867	OW	WAT	W	43	82.258	49.982	108.796	1.00	73.79
20		ATOM	5868	OW	WAT	W	44	82.930	35.645	151.267	1.00	63.76
		ATOM	5869	OW	WAT	W	45	46.819	58.329	146.385	1.00	60.69
		ATOM	5870	OW	WAT	W	46	51.088	37.637	150.843	1.00	13.23
		ATOM	5871	OW	WAT	W	47	85.654	49.565	120.455	1.00	19.95
		ATOM	5872	OW	WAT	W	48	43.280	20.284	160.872	1.00	36.08
25		ATOM	5873	OW	WAT	W	49	64.941	29.265	106.409	1.00	27.65

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		ATOM 5874	OW	WAT	W	50	53.812	59.058	131.412	1.00	10.30
		ATOM 5875	OW	WAT	W	51	63.815	34.009	111.554	1.00	28.94
		ATOM 5876	OW	WAT	W	52	52.597	30.979	130.339	1.00	35.47
		ATOM 5877	OW	WAT	W	53	75.413	36.889	108.878	1.00	34.65
5		ATOM 5878	OW	WAT	W	54	33.175	71.993	137.504	1.00	41.17
		ATOM 5879	OW	WAT	W	55	32.249	49.152	118.432	1.00	30.46
		ATOM 5880	OW	WAT	W	56	64.970	18.372	113.541	1.00	56.87
		ATOM 5881	OW	WAT	W	57	55.890	37.176	116.888	1.00	14.68
		ATOM 5882	OW	WAT	W	58	57.244	50.540	113.160	1.00	41.28
10		ATOM 5883	OW	WAT	W	59	59.828	16.895	142.882	1.00	39.17
		ATOM 5884	OW	WAT	W	60	28.836	47.656	153.599	1.00	30.68
		ATOM 5885	OW	WAT	W	61	81.506	53.671	112.897	1.00	49.59
		ATOM 5886	OW	WAT	W	62	47.649	41.461	130.851	1.00	42.57
		ATOM 5887	OW	WAT	W	63	54.948	46.004	107.182	1.00	31.69
15		ATOM 5888	OW	WAT	W	64	55.659	34.845	127.862	1.00	58.09
		ATOM 5889	OW	WAT	W	65	75.018	45.419	103.954	1.00	31.22
		ATOM 5890	OW	WAT	W	66	45.408	46.717	129.252	1.00	21.92
		ATOM 5891	OW	WAT	W	67	48.451	20.289	175.226	1.00	11.48
		ATOM 5892	OW	WAT	W	68	32.445	64.103	122.602	1.00	21.38
20		ATOM 5893	OW	WAT	W	69	51.400	28.957	158.311	1.00	11.22
		ATOM 5894	OW	WAT	W	70	52.999	28.795	124.644	1.00	31.31
		ATOM 5895	OW	WAT	W	71	50.532	65.365	124.628	1.00	25.07
		ATOM 5896	OW	WAT	W	72	54.743	21.768	140.733	1.00	38.37
		ATOM 5897	OW	WAT	W	73	30.081	67.488	124.003	1.00	87.03
25		ATOM 5898	OW	WAT	W	74	51.552	36.484	166.842	1.00	62.75

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		ATOM	5899	OW	WAT	W	75	53.926	30.167	151.975	1.00	18.99
		ATOM	5900	OW	WAT	W	76	72.796	39.986	109.317	1.00	48.54
		ATOM	5901	OW	WAT	W	77	33.651	66.467	123.228	1.00	32.62
		ATOM	5902	OW	WAT	W	78	57.209	43.978	101.438	1.00	37.49
5		ATOM	5903	OW	WAT	W	79	38.805	20.272	169.093	1.00	22.75
		ATOM	5904	OW	WAT	W	80	40.861	27.988	146.154	1.00	24.28
		ATOM	5905	OW	WAT	W	81	58.444	30.424	127.892	1.00	30.03
		ATOM	5906	OW	WAT	W	82	62.176	19.024	148.159	1.00	48.93
		ATOM	5907	OW	WAT	W	83	52.639	26.131	153.469	1.00	31.85
10		ATOM	5908	OW	WAT	W	84	48.519	44.371	129.843	1.00	12.00
		ATOM	5909	OW	WAT	W	85	48.030	51.006	117.693	1.00	45.09
		ATOM	5910	OW	WAT	W	86	49.166	-1.302	137.132	1.00	84.42
		ATOM	5911	OW	WAT	W	87	83.520	48.387	119.687	1.00	18.35
		ATOM	5912	OW	WAT	W	88	35.947	74.460	123.825	1.00	31.91
15		ATOM	5913	OW	WAT	W	89	35.357	69.774	123.761	1.00	18.95
		ATOM	5914	OW	WAT	W	90	48.669	32.529	138.351	1.00	24.99
		ATOM	5915	OW	WAT	W	91	47.830	48.612	155.099	1.00	11.94
		ATOM	5916	OW	WAT	W	92	53.919	41.978	126.020	1.00	50.52
		ATOM	5917	OW	WAT	W	93	56.336	42.943	85.068	1.00	66.57
20		ATOM	5918	OW	WAT	W	94	52.523	27.242	175.865	1.00	27.69
		ATOM	5919	OW	WAT	W	95	34.715	26.177	89.892	1.00	30.03
		ATOM	5920	OW	WAT	W	96	64.560	27.192	111.683	1.00	37.56
		ATOM	5921	OW	WAT	W	97	60.320	28.769	117.236	1.00	55.08
		ATOM	5922	OW	WAT	W	98	48.721	31.693	140.794	1.00	30.95
25		ATOM	5923	OW	WAT	W	99	60.552	40.991	138.234	1.00	47.11

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		ATOM	5924	OW	WAT	W	100	43.767	56.572	146.139	1.00	31.27
		ATOM	5925	OW	WAT	W	101	53.863	36.038	106.935	1.00	5.44
		ATOM	5926	OW	WAT	W	102	58.138	25.388	125.285	1.00	43.49
		ATOM	5927	OW	WAT	W	103	45.781	48.515	80.575	1.00	12.56
5		ATOM	5928	OW	WAT	W	104	53.137	46.507	103.574	1.00	32.12
		ATOM	5929	OW	WAT	W	105	49.400	45.742	103.206	1.00	32.06
		ATOM	5930	OW	WAT	W	106	55.310	49.284	103.648	1.00	39.08
		ATOM	5931	OW	WAT	W	107	52.549	50.213	105.633	1.00	44.06
		ATOM	5932	OW	WAT	W	108	62.687	43.978	101.536	1.00	30.29
10		ATOM	5933	OW	WAT	W	109	40.344	38.318	110.009	1.00	44.77
		ATOM	5934	OW	WAT	W	110	53.805	28.892	128.480	1.00	18.02
		ATOM	5935	OW	WAT	W	111	51.237	33.110	124.484	1.00	42.01
		ATOM	5936	OW	WAT	W	112	31.615	52.905	131.924	1.00	58.80
		ATOM	5937	OW	WAT	W	113	64.218	17.980	116.492	1.00	59.45
15		ATOM	5938	OW	WAT	W	114	45.228	26.196	147.154	1.00	47.99
		ATOM	5939	OW	WAT	W	115	84.542	57.173	120.478	1.00	43.00
		ATOM	5940	OW	WAT	W	116	44.442	62.342	119.567	1.00	41.60
		ATOM	5941	OW	WAT	W	117	57.835	24.971	102.636	1.00	41.49
		ATOM	5942	OW	WAT	W	118	57.187	51.540	126.157	1.00	37.75
20		ATOM	5943	OW	WAT	W	119	72.153	46.015	157.976	1.00	38.81
		ATOM	5944	OW	WAT	W	120	37.706	53.669	138.696	1.00	45.63
		ATOM	5945	OW	WAT	W	121	48.973	23.511	153.422	1.00	44.30
		ATOM	5946	OW	WAT	W	122	30.282	52.869	126.079	1.00	35.11
		ATOM	5947	OW	WAT	W	123	91.298	38.045	114.588	1.00	70.49
25		ATOM	5948	OW	WAT	W	124	76.438	41.589	134.423	1.00	31.20

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	ATOM	5949	OW	WAT	W	125	26.057	54.761	137.368	1.00	47.77
	ATOM	5950	OW	WAT	W	126	56.121	29.281	127.103	1.00	12.27
	ATOM	5951	OW	WAT	W	127	58.613	30.811	125.192	1.00	39.75
	ATOM	5952	OW	WAT	W	128	52.467	43.138	129.244	1.00	24.22
5	ATOM	5953	OW	WAT	W	129	40.661	11.388	170.482	1.00	4.93
	ATOM	5954	OW	WAT	W	130	76.239	42.882	127.123	1.00	22.41
	ATOM	5955	OW	WAT	W	131	80.958	33.290	113.618	1.00	65.27
	ATOM	5956	OW	WAT	W	132	66.955	16.588	126.364	1.00	60.86
	ATOM	5957	OW	WAT	W	133	48.834	44.392	132.655	1.00	19.86
10	ATOM	5958	OW	WAT	W	134	41.347	80.004	130.297	1.00	42.43
	ATOM	5959	OW	WAT	W	135	53.793	37.221	125.853	1.00	34.41
	ATOM	5960	OW	WAT	W	136	55.050	34.662	125.216	1.00	67.99
	ATOM	5961	OW	WAT	W	137	62.433	43.268	159.348	1.00	21.58
	ATOM	5962	OW	WAT	W	138	51.200	22.038	176.105	1.00	27.59
15	ATOM	5963	OW	WAT	W	139	79.888	35.781	122.928	1.00	36.21
	ATOM	5964	OW	WAT	W	140	55.992	31.104	125.340	1.00	32.97
	ATOM	5965	OW	WAT	W	141	47.731	51.664	155.576	1.00	36.96
	ATOM	5966	OW	WAT	W	142	36.176	61.514	137.445	1.00	43.03
	ATOM	5967	OW	WAT	W	143	66.186	18.474	128.149	1.00	34.83
20	ATOM	5968	OW	WAT	W	144	59.372	22.312	102.105	1.00	47.63
	ATOM	5969	OW	WAT	W	145	52.958	34.736	127.104	1.00	55.29
	ATOM	5970	OW	WAT	W	146	52.763	43.938	133.745	1.00	42.71
	ATOM	5971	OW	WAT	W	147	35.336	14.894	114.386	1.00	56.40
	ATOM	5972	OW	WAT	W	148	56.562	56.390	128.126	1.00	49.09
25	ATOM	5973	OW	WAT	W	149	58.020	53.799	123.774	1.00	22.31

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		ATOM	5974	OW	WAT	W	150	48.478	39.762	132.690	1.00	36.13
		ATOM	5975	OW	WAT	W	151	60.611	25.279	102.975	1.00	48.76
		ATOM	5976	OW	WAT	W	152	69.925	42.743	134.803	1.00	57.90
		ATOM	5977	OW	WAT	W	153	29.539	32.755	143.314	1.00	23.15
5		ATOM	5978	OW	WAT	W	154	38.324	26.282	148.319	1.00	47.11
		ATOM	5979	OW	WAT	W	155	66.620	23.997	135.012	1.00	28.37
		ATOM	5980	OW	WAT	W	156	62.539	14.375	104.234	1.00	48.24
		ATOM	5981	OW	WAT	W	157	33.846	47.374	117.541	1.00	48.50
		ATOM	5982	OW	WAT	W	158	40.453	77.538	129.079	1.00	52.53
10		ATOM	5983	OW	WAT	W	159	65.969	20.443	132.862	1.00	24.54
		ATOM	5984	OW	WAT	W	160	52.118	40.005	129.464	1.00	20.20
		ATOM	5985	OW	WAT	W	161	56.312	-7.499	131.639	1.00	53.88
		ATOM	5986	OW	WAT	W	162	54.590	37.254	132.102	1.00	32.57
		ATOM	5987	OW	WAT	W	163	61.767	31.319	101.427	1.00	67.76
15		ATOM	5988	OW	WAT	W	164	49.462	53.478	156.416	1.00	44.27
		ATOM	5989	OW	WAT	W	165	52.188	39.286	126.956	1.00	23.07
		ATOM	5990	OW	WAT	W	166	53.972	33.042	129.104	1.00	70.58
		ATOM	5991	OW	WAT	W	167	45.656	20.641	174.353	1.00	25.29
		ATOM	5992	OW	WAT	W	168	53.298	23.714	176.495	1.00	30.15
20		ATOM	5993	OW	WAT	W	169	54.575	27.009	125.952	1.00	13.23
		ATOM	5994	OW	WAT	W	170	61.054	41.657	98.156	1.00	75.04
		ATOM	5995	OW	WAT	W	171	56.010	41.634	101.904	1.00	23.95
		ATOM	5996	OW	WAT	W	172	50.901	44.661	130.532	1.00	10.22
		ATOM	5997	OW	WAT	W	173	57.583	53.237	113.256	1.00	22.32
25		ATOM	5998	OW	WAT	W	174	58.839	27.884	126.325	1.00	21.75

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	ATOM	5999	OW	WAT	W	175	61.180	28.615	123.813	1.00	39.55
	ATOM	6000	OW	WAT	W	176	60.616	22.986	123.092	1.00	55.63
	ATOM	6001	OW	WAT	W	177	59.521	27.154	122.266	1.00	49.07
	ATOM	6002	OW	WAT	W	178	62.686	24.096	119.938	1.00	46.13
5	ATOM	6003	OW	WAT	W	179	63.923	21.398	122.774	1.00	60.77
	ATOM	6004	OW	WAT	W	180	63.593	23.721	125.899	1.00	41.61
	ATOM	6005	OW	WAT	W	181	61.005	28.942	127.458	1.00	52.74
	ATOM	6006	OW	WAT	W	182	53.329	43.722	104.773	1.00	17.17
	ATOM	6007	OW	WAT	W	183	55.273	42.143	105.595	1.00	24.59
10	ATOM	6008	OW	WAT	W	184	51.969	23.900	150.631	1.00	32.23
	ATOM	6009	OW	WAT	W	185	92.020	41.415	111.587	1.00	39.88
	ATOM	6010	OW	WAT	W	186	56.265	30.941	129.298	1.00	22.11
	ATOM	6011	OW	WAT	W	187	55.604	38.559	127.239	1.00	66.91
	ATOM	6012	OW	WAT	W	188	75.584	34.118	123.106	1.00	38.02
15	ATOM	6013	OW	WAT	W	189	81.355	39.365	124.315	1.00	41.90
	ATOM	6014	OW	WAT	W	190	50.006	50.010	154.290	1.00	29.42
	ATOM	6015	OW	WAT	W	191	35.503	58.888	137.129	1.00	39.38
	ATOM	6016	OW	WAT	W	192	31.239	55.792	132.588	1.00	37.87
	ATOM	6017	OW	WAT	W	193	55.240	52.126	131.466	1.00	31.11
20	ATOM	6018	OW	WAT	W	194	57.309	54.231	129.746	1.00	63.37
	ATOM	6019	OW	WAT	W	195	71.003	45.180	136.475	1.00	80.91
	ATOM	6020	OW	WAT	W	196	54.713	40.511	129.751	1.00	40.57
	ATOM	6021	OW	WAT	W	197	50.770	41.494	131.258	1.00	33.40
	ATOM	6022	OW	WAT	W	198	58.165	-6.612	133.708	1.00	34.13
25	ATOM	6023	OW	WAT	W	199	58.212	-3.298	134.281	1.00	32.35

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		ATOM	6024	OW	WAT	W	200	59.852	14.819	140.958	1.00	28.76
		ATOM	6025	OW	WAT	W	201	81.677	50.478	140.607	1.00	54.87
		ATOM	6026	OW	WAT	W	202	71.550	35.993	125.132	1.00	70.15
		ATOM	6027	OW	WAT	W	203	41.326	39.514	120.994	1.00	40.86
5		ATOM	6028	OW	WAT	W	204	50.214	57.517	115.380	1.00	42.79
		ATOM	6029	OW	WAT	W	205	47.678	59.460	118.035	1.00	36.46
		ATOM	6030	OW	WAT	W	206	29.795	37.884	148.834	1.00	30.17
		ATOM	6031	OW	WAT	W	207	68.350	31.920	102.820	1.00	45.33
		ATOM	6032	OW	WAT	W	208	55.534	-5.683	133.439	1.00	69.25
10		ATOM	6033	OW	WAT	W	209	54.677	-2.063	134.389	1.00	60.22
		ATOM	6034	OW	WAT	W	210	58.463	32.435	139.891	1.00	26.10
		ATOM	6035	OW	WAT	W	211	65.319	44.211	121.702	1.00	35.17
		ATOM	6036	OW	WAT	W	212	57.775	44.782	97.430	1.00	17.91
		ATOM	6037	OW	WAT	W	213	55.033	34.917	165.381	1.00	57.85
15		ATOM	6038	OW	WAT	W	214	38.919	53.391	164.557	1.00	57.66
		ATOM	6039	OW	WAT	W	215	40.195	13.637	169.442	1.00	38.89
		ATOM	6040	OW	WAT	W	216	83.954	61.585	116.511	1.00	61.89
		ATOM	6041	OW	WAT	W	217	66.918	25.289	119.229	1.00	48.09
		ATOM	6042	OW	WAT	W	218	88.812	47.193	109.542	1.00	36.78
20		ATOM	6043	OW	WAT	W	219	73.593	42.710	123.879	1.00	60.75
		ATOM	6044	OW	WAT	W	220	61.779	35.234	122.873	1.00	31.17
		ATOM	6045	OW	WAT	W	221	36.311	35.458	179.613	1.00	68.00
		ATOM	6046	OW	WAT	W	222	53.341	0.534	133.323	1.00	49.36
		ATOM	6047	OW	WAT	W	223	28.412	41.986	88.752	1.00	34.62
25		ATOM	6048	OW	WAT	W	224	54.346	42.742	82.657	1.00	29.07

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	ATOM	6049	OW	WAT	W	225	74.201	28.595	111.185	1.00	49.52
	ATOM	6050	OW	WAT	W	226	54.971	48.825	141.946	1.00	47.30
	ATOM	6051	OW	WAT	W	227	26.117	54.774	124.697	1.00	42.20
	ATOM	6052	OW	WAT	W	228	51.981	51.104	93.559	1.00	57.17
5	ATOM	6053	OW	WAT	W	229	53.902	51.130	91.504	1.00	61.83
	ATOM	6054	OW	WAT	W	230	53.853	24.612	173.469	1.00	35.79
	ATOM	6055	OW	WAT	W	231	69.375	40.022	155.323	1.00	35.25
	ATOM	6056	OW	WAT	W	232	27.382	70.869	126.008	1.00	56.54
	ATOM	6057	OW	WAT	W	233	51.588	50.869	156.319	1.00	100.50
10	ATOM	6058	OW	WAT	W	234	62.284	29.940	131.669	1.00	50.14
	ATOM	6059	OW	WAT	W	235	58.611	-5.200	136.271	1.00	62.41
	ATOM	6060	OW	WAT	W	236	40.784	58.563	140.200	1.00	48.59
	ATOM	6061	OW	WAT	W	237	65.435	14.670	134.111	1.00	59.57
	ATOM	6062	OW	WAT	W	238	40.753	15.424	137.297	1.00	24.38
15	ATOM	6063	OW	WAT	W	239	61.967	20.559	120.590	1.00	64.77
	ATOM	6064	OW	WAT	W	240	68.753	45.953	126.000	1.00	61.14
	ATOM	6065	OW	WAT	W	241	40.582	15.106	167.375	1.00	62.64
	ATOM	6066	OW	WAT	W	242	85.285	53.304	117.819	1.00	40.26
	ATOM	6067	OW	WAT	W	243	71.290	26.725	145.373	1.00	50.97
20	ATOM	6068	OW	WAT	W	244	67.840	25.531	132.433	1.00	35.82
	ATOM	6069	OW	WAT	W	245	40.382	31.802	137.254	1.00	68.82
	ATOM	6070	OW	WAT	W	246	30.988	71.734	131.970	1.00	30.47
	ATOM	6071	OW	WAT	W	247	52.495	46.154	99.730	1.00	62.53
	ATOM	6072	OW	WAT	W	248	66.992	28.762	137.843	1.00	44.77
25	ATOM	6073	OW	WAT	W	249	73.636	53.315	118.706	1.00	66.51

ATOM 6074 OW WAT W 250 69.873 31.743 142.505 1.00 42.66
 ATOM 6075 OW WAT W 251 39.253 41.343 93.137 1.00 25.12
 ATOM 6076 OW WAT W 252 65.096 54.598 132.667 1.00 55.99
 ATOM 6077 OW WAT W 253 39.331 13.455 135.759 1.00 57.18
 5 ATOM 6078 OW WAT W 254 89.337 57.218 114.493 1.00 52.11
 ATOM 6079 OW WAT W 255 63.958 21.368 127.030 1.00 52.06
 ATOM 6080 OW WAT W 256 70.753 54.054 143.325 1.00 47.10
 ATOM 6081 OW WAT W 257 40.914 8.450 141.943 1.00 61.53
 ATOM 6082 OW WAT W 258 41.535 53.686 89.028 1.00 41.77
 10 ATOM 6083 OW WAT W 259 73.620 48.106 104.091 1.00 56.09
 ATOM 6084 OW WAT W 260 81.375 44.927 128.147 1.00 50.95
 END

In Table 1, the first row is mathematical descriptions
 15 of the crystal and indicates parameters of the unit cell
 (in Å for a-axis, b-axis, and c-axis directions in the
 order), the angles between the axes, and the crystal system.
 The second row through the last row but one describe three-
 dimensional coordinates for each atom. "ATOM" at the first
 20 column indicates that the row describes atom coordinates;
 the second column indicates the atom number; the third
 column indicates the atom type in the amino acid residue or
 the like; the fourth column indicates the amino acid
 residue or the like; the fifth column indicates the class
 25 of molecule (a particular class indicates a single

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polypeptide); the sixth column indicates the amino acid number or the like according to SEQ ID NOs: 1 and 2; the seventh, eighth, and ninth columns indicate coordinates of the atom (in Å for a-axis, b-axis, and c-axis directions in the order); the tenth column indicates the occupancy of the atom (in the present invention 1.00 for all atoms); and the eleventh column indicates the temperature factor of the atom. The last row indicates that the table ends at this row. In connection with the class of molecule, A and C each indicate one molecule of G-CSF; B and D each indicate one molecule of CRH-G-CSF-R; E and F indicate sugar chains linked to B and D, respectively; and W indicates water molecule found in the crystal. In the fourth column, abbreviations other than those for amino acid residues have the following meanings: NAG, N-acetylglucosamine residue; and WAT, water molecule. This table is described according to the format of Protein Data Bank, a notation system commonly used in the art.

The structure coordinates show that one molecule of G-CSF (A) and one molecule of CRH-G-CSF-R (B) form a complex (A-B), and another molecule of G-CSF (C) and another molecule of CRH-G-CSF-R (D) form a complex (C-D). It is also found that the complex (A-B) and the complex (C-D) are associated to form an associate consisting of two molecules of the complex around a non-crystallographic pseudo-twofold

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axis. In the present specification, such an associate of the complexes may also sometimes be simply referred to as a "complex".

On the basis of the structure coordinates obtained from a crystal of the complex between G-CSF and CRH-G-CSF-R, a ribbon drawing (a representation method commonly used in the art for understanding a structure of a protein) showing the structure viewed from a direction orthogonal to the pseudo-twofold axis and a ribbon drawing showing the structure viewed from a direction parallel to the same axis are shown in Figs. 1 and 2, respectively.

As can be seen from these figures, the crystal of the complex between G-CSF and CRH-G-CSF-R contains two molecules of the complex (A-B and C-D) in the minimal unit in which no crystallographic symmetry exists (i.e., an asymmetric unit). These two molecules of the complex are macroscopically related by a non-crystallographic pseudo-twofold axis. The G-CSF portion consists of 4 long α -helixes, and 1 short α -helix, and loop regions connecting the helixes. The CRH-G-CSF-R portion is broadly divided into two regions, each of which consists of about 7 β -sheets, and also contains loop regions connecting the sheets. In the following descriptions, one of these two regions that is closer to the N-terminus is referred to as BN domain and the other which is closer to the C-terminus

is referred to as BC domain. Based on these three-dimensional structures, it can be understood that receiving of G-CSF signal by G-CSF-R represents binding of G-CSF to G-CSF-R, that is, formation of an associate between two molecules of the complex in the relative positions shown in the figures.

It has been shown that G-CSF and the extracellular region of G-CSF-R form a complex consisting of stoichiometrically equivalent quantities of the components, and the complex may exist as a dimer or a tetramer (Horan, T. P. et al., *J. Biochem. (Tokyo)*, **121**:370-375 (1997); Horan, T. P. et al., *Biochemistry*, **35**:4886-4896 (1996); Hiraoka, O. et al., *J. Biol. Chem.*, **270**:25928-25934 (1995); and Hiraoka, O. et al., *FEBS Lett.*, **356**:255-260 (1994)).

It is considered that such facts are reflected in the associate demonstrated in the present invention which is formed by two molecules of G-CSF and two molecules of CRH-G-CSF-R.

Amino acid residues M1 to L4 and side chain portions of Q71 and L131 in G-CSF Molecule A; amino acid residues M1 to P6 and side chain portions of H53, W59, Q68, L70, and Q71 in G-CSF Molecule C; amino acid residues G120 to H126 and K214 to A215 and side chain portions of K63 and K64 in CRH-G-CSF-R Molecule B; and amino acid residues of A1, I119 to H126, and K214 to A215 and side chain portions of K62,

K63, R64, Q127 in CRH-G-CSF-R Molecule D were excluded from considerations in X-ray crystallography, because their positions were disordered even in the crystal.

In this context, crystal structures comprising G-CSF variants and/or G-CSF-R variants which are substantially consistent with the crystal structure according to the present invention are within the scope of the present invention. By "substantially consistent", it is meant that in the major part of the structure, in particular, in a part which forms a secondary structure such as α -helix or β -sheet or a part of which temperature factors are lower than other parts, the mean square deviation for the backbone or Ca carbons is about 2 Å or below. Similarly, the beginning and ending sites of each sequence are not necessarily strictly defined for the present invention, and variants such as those in which another protein is attached to the N-terminus and/or the C-terminus or in which one or more amino acid residues are added to the N-terminus and/or the C-terminus are also included by the present invention, provided that they do not result in any substantial changes in molecular recognition between G-CSF and G-CSF-R. Likewise, variants which have additional sugar chains linked thereto or from which a sugar chain moiety has been removed are also within the scope of the present invention so long as they do not result in any substantial changes in

molecular recognition between G-CSF and G-CSF-R. In connection with molecular recognition, it is meant by "substantially consistent" that the mean square deviation for the backbone or C α carbons of amino acid residues involved in the molecular recognition is about 2 Å or below.

Microscopically, the two molecules of the complex between G-CSF and CRH-G-CSF-R are subtly different from each other. When one of the two molecules of the complex (Molecules A and B; and Molecules C and D) is mathematically subjected to translational and rotational operations in such a way that the respective portions of G-CSFs which form secondary structures, that is, α -helix regions of Molecules A and C, are best superposed, the orientation of Molecules B and D in the BN and BC domains are different from each other. Such difference in orientations of the BN and BC domains are schematically illustrated in Fig. 3. Thus, between the two molecules of the complex contained in a crystallographically independent unit, the relative positions of G-CSF and CRH-G-CSF-R are slightly different by about 10° for BN domain and by about 8° for BC domain. In general, when a substance crystallizes, it proceeds toward the state of least free energy according to a law in natural science. The fact that the two molecules in an asymmetric unit have different structures in the crystal state indicates that the amount

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of decrease in energy due to formation of the crystal state is larger than the amount of increase in energy due to generation of the difference between the structures.

Furthermore, by the structure coordinates determined by the present invention, it becomes possible for the first time to locate interacting amino acid residues in G-CSF and CRH-G-CSF-R. The residues having an interatomic distance of 4.2 Å or less for van der Waals interacting atoms, of more than 3.4 Å to 5.0 Å for electrostatically interacting atoms, or of 3.4 Å or less for hydrogen-bonding are shown in Tables 2, 3, 4, and 5, respectively. In these tables, hydrogen bonds via water molecules are also indicated.

Table 2

Atoms in amino acid residues interacting between G-CSF Molecule A and CRH-G-CSF-R Molecule B, their interaction distances, and their interaction modes

G-CSF			CRH-G-CSF-R		Distance	Mode
(Molecule A)			(Molecule B)		(Å)	
20	S13	O	L196	CD2	3.9	VDW
	L16	CD1	S195	O	3.9	VDW
	L16	CD1	S195	CB	3.4	VDW
	L16	CB	L196	CG	4.2	VDW
	L16	CB	L196	CD1	4.0	VDW
25	K17	O	Y78	CE1	4.2	VDW

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5	K17	CB	Y78	CD1	3.8	VDW
	K17	CG	Y78	CD1	4.0	VDW
	K17	CG	L196	CD2	4.1	VDW
	K17	CD	Y78	CD1	4.0	VDW
	K17	CD	D102	OD2	3.9	VDW
	K17	CE	D102	OD2	3.3	VDW
	K17	CE	D105	OD1	4.2	VDW
	K17	NZ	Y80	OH	3.9	VDW
	K17	NZ	Y80	CZ	4.2	VDW
	K17	NZ	Y80	CE1	3.9	VDW
10	K17	NZ	D102	CB	4.2	VDW
	K17	NZ	D102	CG	3.9	VDW
	K17	NZ	D102	OD2	2.9	HYB
	K17	NZ	D105	OD1	4.4	ESI
	K17	NZ	D105	OD2	4.5	ESI
15	E20	O	Y143	CD2	4.0	VDW
	E20	CB	Y78	OH	4.2	VDW
	E20	CG	Y78	OH	3.5	VDW
	E20	CG	Y143	O	3.9	VDW
	E20	CG	Y143	CD2	3.8	VDW
20	E20	CG	Y143	CE2	3.9	VDW
	E20	CD	Y78	CE1	4.2	VDW
	E20	CD	Y78	OH	3.5	VDW
	E20	CD	Y143	CE2	4.1	VDW
	E20	CD	R193	NE	3.9	VDW
25	E20	CD	R193	NE	3.9	VDW

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5	E20	CD	R193	CZ	4.2		VDW
	E20	CD	R193	NH2	3.5		VDW
	E20	OE1	M144	CA	4.2		VDW
	E20	OE1	M144	CG	3.8		VDW
	E20	OE1	E145	N	2.8	2.8	WMH WAT6
	E20	OE1	R193	NE	3.2		HYB
	E20	OE1	R193	CZ	3.8		VDW
	E20	OE1	R193	NH2	3.4		HYB
	E20	OE2	Y78	CE1	3.3		VDW
	E20	OE2	Y78	CZ	3.4		VDW
10	E20	OE2	Y78	OH	2.7		HYB
	E20	OE2	Y143	CE2	3.9		VDW
	E20	OE2	R193	NE	3.7		VDW
	E20	OE2	R193	CZ	3.7		VDW
	E20	OE2	R193	NH2	2.9		HYB
15	Q21	CG	Y78	CG	3.8		VDW
	Q21	CG	Y78	CD1	4.2		VDW
	Q21	CG	Y78	CD2	3.4		VDW
	Q21	CG	Y78	CE1	4.2		VDW
	Q21	CG	Y78	CE2	3.3		VDW
20	Q21	CG	Y78	CZ	3.8		VDW
	Q21	CD	Y78	CB	3.9		VDW
	Q21	CD	Y78	CG	3.6		VDW
	Q21	CD	Y78	CD2	3.3		VDW
	Q21	CD	Y78	CE2	3.8		VDW
25							

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5	Q21	OE1	Y78	CB	3.6		VDW
	Q21	OE1	Y78	CG	3.7		VDW
	Q21	OE1	Y78	CD2	3.8		VDW
	Q21	NE2	Y78	CG	4.1		VDW
	Q21	NE2	Y78	CD2	3.4		VDW
	Q21	NE2	Y78	CE2	4.0		VDW
10	R23	C	Y143	CB	4.2		VDW
	R23	CB	Y143	O	3.7		VDW
	R23	CD	Y143	O	3.5		VDW
	R23	NH1	Y143	O	3.3		HYB
	R23	NH1	E145	N	3.8		VDW
	R23	NH1	E145	N	3.4	2.8	WMH WAT6
15	R23	NH1	E145	CB	4.0		VDW
	R23	NH2	E145	CD	4.1		VDW
	R23	NH2	E145	OE1	3.8		ESI
	R23	NH2	E145	OE2	4.5		ESI
	K24	N	Y143	CB	3.9		VDW
	K24	CA	Y143	CB	3.8		VDW
20	K24	CA	Y143	CG	4.0		VDW
	K24	CB	Y143	CG	3.9		VDW
	K24	CB	Y143	CD2	3.8		VDW
	K24	CG	Y143	CD2	4.2		VDW
	K24	CG	Y143	CG	4.2		VDW
	K24	CD	Y143	CE2	4.2		VDW
25	K24	NZ	Y143	CZ	3.9		VDW

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	K24	NZ	Y143	OH	4.1		VDW
	K24	NZ	Y143	CE1	3.8		VDW
	L109	CB	R72	CZ	4.2		VDW
	L109	CB	R72	NH1	4.0		VDW
5	D110	N	R72	NH1	4.1		VDW
	D110	CG	R72	NH1	3.7		VDW
	D110	OD1	R72	NH1	3.2		HYB
	D110	OD1	R72	NH1	3.3	3.3	WMH WAT183
	D110	OD2	R72	NH1	4.0		ESI
10	D113	CA	L76	CD1	4.0		VDW
	D113	O	L76	CD1	4.1		VDW
	D113	CB	R72	NH2	4.2		VDW
	D113	CB	L76	CD1	3.7		VDW
	D113	CG	R72	NH2	3.2		VDW
15	D113	CG	L76	CD1	3.7		VDW
	D113	OD1	R72	NH2	3.8		ESI
	D113	OD1	L76	CD1	4.2		VDW
	D113	OD2	R72	CZ	3.7		VDW
	D113	OD2	R72	NH2	2.4		HYB
20	D113	OD2	L75	O	3.6		VDW
	D113	OD2	L76	CA	3.7		VDW
	D113	OD2	L76	C	4.2		VDW
	D113	OD2	L76	CD1	3.7		VDW
	D113	OD2	L77	N	3.6		VDW
25	T116	CG2	L76	CD1	4.2		VDW

5	T116	CG2	L76	CD2	4.1		VDW
	T116	CB	L76	CD1	4.1		VDW
	T117	OG1	L77	O	3.4		VDW
	T117	OG1	Y78	C	4.1		VDW
	T117	OG1	Y78	O	3.7		VDW
	T117	OG1	Y78	CB	3.9		VDW
	Q120	CB	Q79	OE1	4.1		VDW
10	Q120	CD	L76	CD2	4.1		VDW
	Q120	OE1	S45	O	3.3	3.0	WMH WAT96
	Q120	OE1	L76	CD2	3.7		VDW
	Q120	OE1	Q79	CB	4.0		VDW
	Q120	OE1	Q79	CG	3.2		VDW
	Q120	OE1	Q79	CD	3.8		VDW
	Q120	OE1	Q79	OE1	3.6		VDW
15	E123	CB	R46	NH2	3.7		VDW
	E123	OE1	R46	NH2	4.3		ESI
	E124	N	R46	NH2	3.9		VDW
	E124	N	R46	CZ	4.2		VDW
	E124	OE1	R46	CB	4.2		VDW
20	E124	CA	R46	NH1	4.0		VDW
	E124	CA	R46	CZ	4.2		VDW
	E124	OE1	R46	CD	3.4		VDW
	E124	CB	R46	CZ	4.0		VDW
	E124	CB	R46	NH1	3.9		VDW
25	E124	CG	R46	NH1	4.1		VDW

Table 3

Atoms in amino acid residues interacting between G-CSF
Molecule A and CRH-G-CSF-R Molecule D, their interaction

5 distances, and their interaction modes

	G-CSF		CRH-G-CSF-R		Distance	Mode
	(Molecule A)		(Molecule D)		(Å)	
	G5	CA	P168	CD	4.1	VDW
	G5	CA	K171	CE	3.9	VDW
10	P6	C	H166	O	3.6	VDW
	P6	O	F165	O	4.0	VDW
	P6	O	H166	O	3.3	VDW
	P6	O	H166	CB	3.7	VDW
	P6	O	H166	C	4.1	VDW
15	P6	CD	H166	O	4.2	VDW
	P6	CD	P168	CD	4.2	VDW
	P6	CG	H166	O	3.6	VDW
	A7	N	H166	O	4.0	VDW
	A7	CA	F165	O	3.3	VDW
20	A7	CA	H166	O	4.2	VDW
	A7	C	F165	O	3.7	VDW
	A7	CB	V164	CG1	3.5	VDW
	A7	CB	F165	O	4.0	VDW
	A7	CB	L167	CD2	3.5	VDW
25	S8	N	F165	N	4.2	VDW

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5	S8	N	F165	O	3.3	HYB
	S8	C	F165	N	3.9	VDW
	S8	O	V164	CA	3.7	VDW
	S8	O	V164	C	3.7	VDW
	S8	O	F165	N	2.8	HYB
	S8	O	F165	CA	3.6	VDW
	S8	O	F165	C	4.1	VDW
	S8	O	F165	O	3.8	VDW
	S8	O	F165	CB	3.5	VDW
	S8	O	F165	CG	3.8	VDW
10	S8	O	F165	CD1	3.3	VDW
	S9	CA	L163	O	3.7	VDW
	S9	C	F165	CD1	3.6	VDW
	S9	C	F165	CE1	3.8	VDW
	S9	O	F165	CD1	3.7	VDW
15	S9	O	F165	CE1	3.3	VDW
	L10	N	F165	CD1	3.8	VDW
	L10	N	F165	CE1	4.1	VDW
	L10	CA	F165	CD1	4.0	VDW
	L10	CA	F165	CE1	4.1	VDW
20	L10	C	F165	CD1	3.6	VDW
	L10	C	F165	CE1	4.0	VDW
	L10	O	F165	CB	4.2	VDW
	L10	O	F165	CD1	3.8	VDW
	P11	N	F165	CG	4.2	VDW
25						

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5	P11	N	F165	CD1	3.6	VDW
	P11	N	F165	CE1	3.7	VDW
	P11	CA	F165	CG	4.2	VDW
	P11	CA	F165	CD1	4.1	VDW
	P11	C	H166	NE2	4.0	VDW
10	P11	CG	F165	CE1	3.7	VDW
	P11	CG	F165	CE2	4.1	VDW
	P11	CG	F165	CZ	3.6	VDW
	P11	CD	F165	CD1	4.2	VDW
	P11	CD	F165	CE1	3.7	VDW
15	P11	CD	F165	CZ	4.2	VDW
	Q12	N	H166	CD2	3.9	VDW
	Q12	N	H166	NE2	3.1	HYB
	Q12	N	H166	CE1	4.1	VDW
	Q12	CA	H166	NE2	3.7	VDW
20	Q12	CB	H166	CD2	4.2	VDW
	Q12	CB	H166	CE1	3.6	VDW
	Q12	CB	H166	NE2	3.2	VDW
	L125	O	W161	O	3.8	VDW
	L125	CD2	F165	CZ	3.6	VDW
	L125	CD2	F165	CE1	3.7	VDW

Table 4

Atoms in amino acid residues interacting between G-CSF

25 Molecule C and CRH-G-CSF-R Molecule D, their interaction

distances, and their interaction modes

G-CSF			CRH-G-CSF-R		Distance	Mode
(Molecule C)			(Molecule D)		(Å)	
5	S13	O	L196	CD2	4.2	VDW
	L16	C	L196	CD1	4.2	VDW
	L16	CB	L196	CD1	4.0	VDW
	L16	CD1	S195	CB	3.5	VDW
	L16	CD1	S195	OG	4.2	VDW
10	K17	CB	Y78	CD2	4.2	VDW
	K17	CG	L196	CD1	4.2	VDW
	K17	CG	L196	CD2	4.1	VDW
	K17	CE	L196	CD2	4.2	VDW
	K17	NZ	D102	OD2	4.5	ESI
15	E20	O	Y143	O	4.2	VDW
	E20	O	Y143	CD2	3.9	VDW
	E20	CG	Y78	OH	3.8	VDW
	E20	CG	Y143	O	3.9	VDW
	E20	CG	Y143	CD2	3.8	VDW
20	E20	CG	Y143	CE2	3.9	VDW
	E20	CD	Y78	OH	3.8	VDW
	E20	CD	Y143	CE2	4.1	VDW
	E20	CD	R193	NH2	3.6	VDW
	E20	CD	R193	NE	3.7	VDW
25	E20	CD	R193	CZ	4.1	VDW
	E20	OE1	Y78	CE2	3.5	VDW

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5	E20	OE1	Y78	CZ	3.7	VDW
	E20	OE1	Y78	OH	3.0	HYB
	E20	OE1	Y143	CE2	4.1	VDW
	E20	OE1	R193	CZ	3.6	VDW
	E20	OE1	R193	NH2	2.8	HYB
10	E20	OE1	R193	NE	3.5	ESI
	E20	OE2	M144	CA	4.1	VDW
	E20	OE2	M144	CG	3.7	VDW
	E20	OE2	R193	CG	4.0	VDW
	E20	OE2	R193	CD	4.1	VDW
15	E20	OE2	R193	NH2	3.7	ESI
	E20	OE2	R193	NE	3.1	HYB
	E20	OE2	R193	CZ	3.8	VDW
	Q21	CG	Y78	CG	3.9	VDW
	Q21	CG	Y78	CD1	3.7	VDW
20	Q21	CG	Y78	CD2	3.9	VDW
	Q21	CG	Y78	CE1	3.6	VDW
	Q21	CG	Y78	CE2	3.8	VDW
	Q21	CG	Y78	CZ	3.7	VDW
	Q21	CD	Y78	CB	4.0	VDW
25	Q21	CD	Y78	CG	3.6	VDW
	Q21	CD	Y78	CD1	3.6	VDW
	Q21	CD	Y78	CD2	4.0	VDW
	Q21	CD	Y78	CE1	4.1	VDW
	Q21	OE1	Y78	CB	3.9	VDW

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5	Q21	OE1	Y78	CG	3.9	VDW
	Q21	OE1	Y78	CD2	4.2	VDW
	Q21	NE2	Y78	CB	4.0	VDW
	Q21	NE2	Y78	CG	3.8	VDW
	Q21	NE2	Y78	CD1	3.5	VDW
	Q21	NE2	Y78	CE1	4.1	VDW
10	R23	C	Y143	CB	3.7	VDW
	R23	O	Y143	CB	3.9	VDW
	R23	CB	Y143	CA	3.9	VDW
	R23	CB	Y143	C	4.0	VDW
	R23	CB	Y143	O	3.3	VDW
	R23	CB	Y143	CB	3.8	VDW
15	R23	CG	Y143	O	3.9	VDW
	R23	CD	Y143	C	3.9	VDW
	R23	CD	Y143	O	3.1	VDW
	R23	CD	Y143	CA	4.2	VDW
	R23	NE	Y143	O	3.9	VDW
	R23	NE	E145	OE2	4.1	ESI
20	R23	CZ	Y143	O	3.9	VDW
	R23	CZ	E145	CB	4.1	VDW
	R23	CZ	E145	OE2	3.9	VDW
	R23	CZ	E145	CD	4.1	VDW
	R23	NH1	Y143	O	3.2	HYB
	R23	NH1	E145	N	3.6	VDW
25	R23	NH1	E145	CA	4.2	VDW

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5	R23	NH1	E145	CB	3.6	VDW
	R23	NH2	E145	CB	4.0	VDW
	R23	NH2	E145	CD	3.7	VDW
	R23	NH2	E145	OE1	3.5	ESI
	R23	NH2	E145	OE2	3.9	ESI
10	K24	N	Y143	CB	3.5	VDW
	K24	N	Y143	CG	4.0	VDW
	K24	N	Y143	CD2	4.1	VDW
	K24	CA	Y143	CB	3.6	VDW
	K24	CA	Y143	CG	3.8	VDW
15	K24	CA	Y143	CD2	4.0	VDW
	K24	CB	Y143	CE2	4.2	VDW
	K24	CB	Y143	CG	4.0	VDW
	K24	CB	Y143	CD2	3.8	VDW
	K24	CG	Y143	CG	4.2	VDW
20	K24	CG	Y143	CD2	4.1	VDW
	K24	CG	Y143	CE2	4.2	VDW
	K24	CD	Y78	OH	3.7	VDW
	K24	CD	Y143	CE2	4.0	VDW
	K24	CD	Y143	CZ	4.1	VDW
25	K24	CD	M104	CE	4.1	VDW
	K24	CE	M104	CE	3.8	VDW
	K24	CE	L77	CD1	3.9	VDW
	K24	NZ	M104	CE	3.9	VDW
	K24	NZ	Y143	CE1	4.0	VDW

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		K24	NZ	Y143	CZ	3.9		VDW
		K24	NZ	Y143	OH	3.8		VDW
		L109	C	R72	NH1	4.1		VDW
		L109	C	R72	NH2	4.2		VDW
5		L109	CB	R72	CZ	3.6		VDW
		L109	CB	R72	NH1	3.6		VDW
		L109	CB	R72	NH2	3.6		VDW
		L109	CD1	R72	NE	4.1		VDW
		L109	CD1	R72	CZ	4.1		VDW
10		L109	CD1	K73	CA	4.1		VDW
		D110	N	R72	NH1	3.7		VDW
		D110	CG	R72	NH1	3.2		VDW
		D110	CA	R72	NH1	4.1		VDW
		D110	CB	R72	NH1	4.2		VDW
15		D110	OD1	R72	CZ	3.9		VDW
		D110	OD1	R72	NH1	2.8		HYB
		D110	OD1	L77	CD1	3.9		VDW
		D110	OD2	R72	NH1	3.5		ESI
		D110	OD2	N20	OD1	3.3 2.7	WMH	WAT28
20		D113	CA	L76	CD1	4.0		VDW
		D113	CB	L76	CD1	3.6		VDW
		D113	CB	L77	O	3.9		VDW
		D113	CG	R72	NH2	3.9		VDW
		D113	CG	L76	CD1	3.2		VDW
25		D113	CG	L77	O	4.1		VDW

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5	D113	CG	L77	N	4.0	VDW
	D113	OD1	R72	NH2	4.2	ESI
	D113	OD1	L76	CD1	3.4	VDW
	D113	OD2	R72	NH2	3.1	HYB
	D113	OD2	L75	O	4.1	VDW
	D113	OD2	L76	C	3.6	VDW
	D113	OD2	L76	CA	3.5	VDW
	D113	OD2	L76	CD1	3.3	VDW
10	D113	OD2	L76	CG	4.2	VDW
	D113	OD2	L77	C	4.2	VDW
	D113	OD2	L77	O	3.7	VDW
	D113	OD2	L77	N	2.9	HYB
	D113	OD2	L77	CA	3.8	VDW
15	D113	OD2	L77	CB	3.9	VDW
	T117	OG1	L77	O	4.2	VDW
	T117	OG1	Y78	C	4.2	VDW
	T117	OG1	Y78	O	3.6	VDW
	T117	OG1	Y78	CB	3.7	VDW
20	Q120	CD	R46	NE	4.1	VDW
	Q120	CD	Q79	OE1	4.2	VDW
	Q120	OE1	Q79	CG	3.8	VDW
	Q120	OE1	Q79	CD	3.7	VDW
	Q120	OE1	Q79	OE1	3.0	VDW
25	Q120	NE2	R46	NE	4.0	VDW
	E123	OE1	R46	NH2	4.6	ESI

Table 5

Atoms in amino acid residues interacting between G-CSF
Molecule C and CRH-G-CSF-R Molecule B, their interaction
5 distances, and their interaction modes

	G-CSF		CRH-G-CSF-R		Distance	Mode
	(Molecule C)		(Molecule B)		(Å)	
	A7	N	H166	O	3.4	VDW
	A7	N	H166	CB	4.2	VDW
10	A7	CA	F165	C	4.2	VDW
	A7	CA	F165	O	3.0	VDW
	A7	CA	H166	C	3.9	VDW
	A7	CA	H166	O	3.3	VDW
	A7	CA	H166	CB	3.9	VDW
15	A7	C	F165	O	3.5	VDW
	A7	CB	F165	O	3.3	VDW
	A7	CB	H166	C	4.0	VDW
	A7	CB	H166	O	3.4	VDW
	A7	CB	L167	CD2	3.9	VDW
20	S8	N	F165	C	4.0	VDW
	S8	N	F165	O	3.0	HYB
	S8	CA	F165	O	4.2	VDW
	S8	C	F165	N	4.0	VDW
	S8	O	V164	CA	3.9	VDW
25	S8	O	V164	C	3.8	VDW

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5	S8	O	F165	N	2.8	HYB
	S8	O	F165	CA	3.5	VDW
	S8	O	F165	C	3.9	VDW
	S8	O	F165	O	3.6	VDW
	S8	O	F165	CB	3.5	VDW
10	S8	O	F165	CG	4.0	VDW
	S8	O	F165	CD1	3.5	VDW
	S9	CA	L163	O	4.2	VDW
	S9	CA	F165	CD2	4.2	VDW
	S9	C	F165	CD2	3.6	VDW
15	S9	C	F165	CE2	3.8	VDW
	S9	O	F165	CD2	3.5	VDW
	S9	O	F165	CE2	3.2	VDW
	L10	N	F165	CD2	3.9	VDW
	L10	N	F165	CE2	4.2	VDW
20	L10	CA	F165	CD2	4.1	VDW
	L10	C	F165	CD2	3.9	VDW
	L10	C	F165	CE2	4.2	VDW
	L10	O	F165	CB	4.2	VDW
	L10	O	F165	CD2	4.1	VDW
25	L10	O	H166	CD2	3.9	VDW
	L10	O	H166	NE2	4.0	VDW
	P11	N	F165	CG	4.2	VDW
	P11	N	F165	CD2	4.0	VDW
	P11	N	F165	CE2	4.1	VDW

	P11	CA	H166	NE2	3.8		VDW
	P11	C	H166	NE2	3.9		VDW
	P11	CB	F165	CE1	4.0		VDW
	P11	CB	F165	CD1	4.2		VDW
5	P11	CD	F165	CD2	4.2		VDW
	P11	CD	F165	CE1	3.8		VDW
	P11	CD	F165	CZ	3.9		VDW
	Q12	N	H166	CD2	4.1		VDW
	Q12	N	H166	CE1	3.9		VDW
10	Q12	N	H166	NE2	3.1		HYB
	Q12	CA	H166	NE2	4.0		VDW
	Q12	CB	H166	CE1	3.8		VDW
	Q12	CB	H166	NE2	3.7		VDW
	L125	O	L163	N	3.4	3.0	WMH WAT40
15	L125	CD2	F165	CE2	4.2		VDW
	L125	CD2	F165	CZ	4.1		VDW

The above tables indicate atoms in amino acid residues interacting between G-CSF Molecule A and CRH-G-CSF-R Molecule B (Table 2), between G-CSF Molecule A and CRH-G-CSF-R Molecule D (Table 3), between G-CSF Molecule C and CRH-G-CSF-R Molecule D (Table 4), or G-CSF Molecule C and CRH-G-CSF-R Molecule B (Table 5), their interaction distances, and their interaction modes. According to the structure coordinates shown in Table 1, the residues having

an interatomic distance of 4.2 Å or less for van der Waals interacting atoms, of more than 3.4 Å to 5.0 Å for electrostatically interacting atoms, or of 3.4 Å or less for hydrogen-bonding atoms are shown in each of Tables 2, 3, 4, and 5. In these tables, hydrogen bonds via water molecules are also indicated. The first column describes amino acid residues and their number in Molecule A or C; the second column describes atoms in the amino acid residues; the third column describes amino acid residues and their number in Molecule B or D; the fourth column describes atoms in the amino acid residues; the fifth column describes interatomic distances between them in Å; and the sixth column describes interaction modes. In connection with interaction modes, VDW denotes van der Waals interaction; ESI denotes electrostatic interaction; and HYB denotes hydrogen bonding. In order to describe a hydrogen bond via a water molecule, two values for interatomic distance are necessary. In such cases, the fifth column is further divided into two columns to describe these values; the abbreviation WMH is indicated in the sixth column, and the water molecule number involved is indicated in the seventh column.

First, in one molecule of CRH-G-CSF-R, the loop regions in each of the two domains recognize one molecule of G-CSF at one side. Amino acid residues characterizing

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this recognition are S13, L16, K17, E20, Q21, R23, K24, L109, D110, D113, T116, T117, Q120, E123, and E124 on the G-CSF side (Tables 2 and 4), and N20, S45, R46, R72, K73, L75, L76, L77, Y78, Q79, Y80, D102, M104, D105, Y143, M144, E145, R193, S195, and L196 on the CRH-G-CSF-R side (Tables 2 and 4), respectively. Thus, recognition between one molecule of G-CSF and one molecule of G-CSF-R (that is, formation of the complex) is characterized by interactions among these and adjacent amino acid residues.

Next, macroscopically, two molecules of the above complex recognize each other (that is, association of the complexes) in such a way related by a non-crystallographic pseudo-twofold axis. Amino acid residues characterizing this recognition are G5, P6, A7, S8, S9, L10, P11, Q12, and L125 on the G-CSF side (Tables 3 and 5), and W161, L163, V164, F165, H166, L167, P168, and K171 on the CRH-G-CSF-R side (Tables 3 and 5), respectively. Thus, the complex consisting of one molecule of G-CSF and one molecule of CRH-G-CSF-R further self-associates to form a homodimer of the complex, and this recognition is characterized by interactions among these and adjacent amino acid residues.

The region surrounded by the dimer of the complex (that is, the associate) forms a space in which water molecules exist. This space is characterized by Y3 to L14, R46 to Y51, G92 to V106, E145 to E147, H166 to S169, S194

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to G198, and amino acid residues adjacent thereto in CRH-G-CSF-R.

Furthermore, from the three-dimensional structure coordinates of human-type G-CSF and mouse-type CRH-G-CSF-R in the present invention, three-dimensional structure coordinates of G-CSF and CRH-G-CSF-R derived from other species having homologous amino acid sequences can be derived by homology modelings (Haruki Nakamura and Kenta Nakai, "Biotechnology-no-tameno-Computer-nyumon" (An introduction to computers for biotechnology), pp. 186-204, Corona Publishing Co., 1995). The more homologous between the amino acid sequences is, the more easily the three-dimensional structure coordinates of interest can be derived. Since the amino acid sequence of human-type G-CSF-R has a high homology to that of mouse-type G-CSF-R, three-dimensional structure coordinates of human-type G-CSF-R can easily be derived.

Based on the three-dimensional structure coordinates of human-type G-CSF and mouse-type CRH-G-CSF-R obtained in Examples 3 of the present invention, structure coordinates for human-type CRH-G-CSF-R were prepared by homology modeling. First, in the structure coordinates of mouse CRH-G-CSF-R, the side chain portions of amino acid residues which are not identical between mouse and human CRH-G-CSF-Rs were replaced by corresponding side chains of human

amino acid residues. At this stage, conformations of the side chains were selected so that the atoms do not stereochemically overlap one another and the energy became minimal. Furthermore, conformational calculations were conducted for all amino acid residues including their backbone portions to minimize the energy of the whole molecule.

The three-dimensional structure coordinates for human-type CRH-G-CSF-R thus derived are shown in Table 6.

Table 6

Three-dimensional structure coordinates of a CRH-G-CSF-R model having the human-type sequence

ATOM	1	N	ALA B	1	96.851	56.959	118.826	1.00	0.00
ATOM	2	CA	ALA B	1	97.218	55.689	119.477	1.00	0.00
ATOM	3	C	ALA B	1	96.567	54.527	118.723	1.00	0.00
ATOM	4	O	ALA B	1	96.354	54.644	117.518	1.00	0.00
ATOM	5	CB	ALA B	1	96.853	55.721	120.967	1.00	0.00
ATOM	6	N	GLY B	2	96.244	53.427	119.409	1.00	0.00
ATOM	7	CA	GLY B	2	95.590	52.285	118.798	1.00	0.00
ATOM	8	C	GLY B	2	95.235	51.264	119.873	1.00	0.00
ATOM	9	O	GLY B	2	96.130	50.772	120.557	1.00	0.00
ATOM	10	N	TYR B	3	93.944	50.953	120.026	1.00	0.00
ATOM	11	CA	TYR B	3	93.469	49.915	120.935	1.00	0.00
ATOM	12	C	TYR B	3	92.627	48.914	120.140	1.00	0.00

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	ATOM	13	O	TYR	B	3	91.955	49.313	119.190	1.00	0.00
	ATOM	14	CB	TYR	B	3	92.643	50.538	122.069	1.00	0.00
	ATOM	15	CG	TYR	B	3	93.336	51.648	122.838	1.00	0.00
	ATOM	16	CD1	TYR	B	3	94.092	51.355	123.989	1.00	0.00
5	ATOM	17	CD2	TYR	B	3	93.177	52.986	122.432	1.00	0.00
	ATOM	18	CE1	TYR	B	3	94.668	52.396	124.739	1.00	0.00
	ATOM	19	CE2	TYR	B	3	93.759	54.025	123.178	1.00	0.00
	ATOM	20	CZ	TYR	B	3	94.493	53.731	124.339	1.00	0.00
	ATOM	21	OH	TYR	B	3	95.036	54.740	125.080	1.00	0.00
10	ATOM	22	N	PRO	B	4	92.638	47.620	120.497	1.00	0.00
	ATOM	23	CA	PRO	B	4	91.775	46.633	119.869	1.00	0.00
	ATOM	24	C	PRO	B	4	90.313	46.910	120.248	1.00	0.00
	ATOM	25	O	PRO	B	4	90.068	47.532	121.282	1.00	0.00
	ATOM	26	CB	PRO	B	4	92.254	45.281	120.397	1.00	0.00
15	ATOM	27	CG	PRO	B	4	92.807	45.630	121.778	1.00	0.00
	ATOM	28	CD	PRO	B	4	93.409	47.020	121.573	1.00	0.00
	ATOM	29	N	PRO	B	5	89.328	46.476	119.442	1.00	0.00
	ATOM	30	CA	PRO	B	5	87.926	46.783	119.674	1.00	0.00
	ATOM	31	C	PRO	B	5	87.403	46.103	120.938	1.00	0.00
20	ATOM	32	O	PRO	B	5	87.795	44.978	121.246	1.00	0.00
	ATOM	33	CB	PRO	B	5	87.174	46.277	118.436	1.00	0.00
	ATOM	34	CG	PRO	B	5	88.257	46.141	117.372	1.00	0.00
	ATOM	35	CD	PRO	B	5	89.447	45.701	118.220	1.00	0.00
	ATOM	36	N	ALA	B	6	86.491	46.775	121.647	1.00	0.00
25	ATOM	37	CA	ALA	B	6	85.777	46.218	122.788	1.00	0.00

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5	ATOM	38	C	ALA	B	6	84.519	45.497	122.305	1.00	0.00
	ATOM	39	O	ALA	B	6	84.007	45.805	121.229	1.00	0.00
	ATOM	40	CB	ALA	B	6	85.407	47.347	123.751	1.00	0.00
	ATOM	41	N	ILE	B	7	84.025	44.533	123.093	1.00	0.00
	ATOM	42	CA	ILE	B	7	82.782	43.823	122.807	1.00	0.00
10	ATOM	43	C	ILE	B	7	81.616	44.822	122.766	1.00	0.00
	ATOM	44	O	ILE	B	7	81.395	45.522	123.753	1.00	0.00
	ATOM	45	CB	ILE	B	7	82.544	42.681	123.826	1.00	0.00
	ATOM	46	CG1	ILE	B	7	82.535	43.139	125.300	1.00	0.00
	ATOM	47	CG2	ILE	B	7	83.583	41.570	123.610	1.00	0.00
15	ATOM	48	CD1	ILE	B	7	82.251	41.998	126.283	1.00	0.00
	ATOM	49	N	PRO	B	8	80.871	44.939	121.652	1.00	0.00
	ATOM	50	CA	PRO	B	8	79.701	45.802	121.607	1.00	0.00
	ATOM	51	C	PRO	B	8	78.647	45.365	122.629	1.00	0.00
	ATOM	52	O	PRO	B	8	78.523	44.175	122.926	1.00	0.00
20	ATOM	53	CB	PRO	B	8	79.180	45.754	120.169	1.00	0.00
	ATOM	54	CG	PRO	B	8	80.414	45.339	119.369	1.00	0.00
	ATOM	55	CD	PRO	B	8	81.158	44.413	120.327	1.00	0.00
	ATOM	56	N	HIS	B	9	77.916	46.340	123.179	1.00	0.00
	ATOM	57	CA	HIS	B	9	77.006	46.177	124.306	1.00	0.00
25	ATOM	58	C	HIS	B	9	75.633	46.776	123.969	1.00	0.00
	ATOM	59	O	HIS	B	9	75.474	47.403	122.925	1.00	0.00
	ATOM	60	CB	HIS	B	9	77.660	46.839	125.528	1.00	0.00
	ATOM	61	CG	HIS	B	9	76.922	46.634	126.824	1.00	0.00
	ATOM	62	ND1	HIS	B	9	76.850	45.400	127.452	1.00	0.00

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5	ATOM	63	CD2	HIS	B	9	76.193	47.489	127.615	1.00	0.00
	ATOM	64	CE1	HIS	B	9	76.092	45.556	128.551	1.00	0.00
	ATOM	65	NE2	HIS	B	9	75.653	46.807	128.702	1.00	0.00
	ATOM	66	N	ASN	B	10	74.642	46.559	124.848	1.00	0.00
	ATOM	67	CA	ASN	B	10	73.255	47.011	124.738	1.00	0.00
10	ATOM	68	C	ASN	B	10	72.722	46.898	123.306	1.00	0.00
	ATOM	69	O	ASN	B	10	72.188	47.853	122.743	1.00	0.00
	ATOM	70	CB	ASN	B	10	73.083	48.415	125.346	1.00	0.00
	ATOM	71	CG	ASN	B	10	71.622	48.755	125.653	1.00	0.00
	ATOM	72	OD1	ASN	B	10	70.743	47.898	125.597	1.00	0.00
15	ATOM	73	ND2	ASN	B	10	71.353	50.012	126.009	1.00	0.00
	ATOM	74	N	LEU	B	11	72.892	45.705	122.726	1.00	0.00
	ATOM	75	CA	LEU	B	11	72.383	45.373	121.411	1.00	0.00
	ATOM	76	C	LEU	B	11	70.867	45.279	121.518	1.00	0.00
	ATOM	77	O	LEU	B	11	70.358	44.501	122.324	1.00	0.00
20	ATOM	78	CB	LEU	B	11	72.998	44.050	120.936	1.00	0.00
	ATOM	79	CG	LEU	B	11	72.414	43.532	119.609	1.00	0.00
	ATOM	80	CD1	LEU	B	11	72.659	44.499	118.446	1.00	0.00
	ATOM	81	CD2	LEU	B	11	73.033	42.169	119.288	1.00	0.00
	ATOM	82	N	SER	B	12	70.147	46.067	120.723	1.00	0.00
25	ATOM	83	CA	SER	B	12	68.696	46.047	120.706	1.00	0.00
	ATOM	84	C	SER	B	12	68.226	46.224	119.274	1.00	0.00
	ATOM	85	O	SER	B	12	68.884	46.902	118.489	1.00	0.00
	ATOM	86	CB	SER	B	12	68.141	47.129	121.639	1.00	0.00
	ATOM	87	OG	SER	B	12	68.778	48.371	121.420	1.00	0.00

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5	ATOM	88	N	CYS	B	13	67.100	45.589	118.942	1.00	0.00
	ATOM	89	CA	CYS	B	13	66.508	45.654	117.621	1.00	0.00
	ATOM	90	C	CYS	B	13	65.038	46.018	117.756	1.00	0.00
	ATOM	91	O	CYS	B	13	64.398	45.647	118.738	1.00	0.00
	ATOM	92	CB	CYS	B	13	66.674	44.320	116.894	1.00	0.00
10	ATOM	93	SG	CYS	B	13	68.362	43.690	116.667	1.00	0.00
	ATOM	94	N	LEU	B	14	64.522	46.748	116.764	1.00	0.00
	ATOM	95	CA	LEU	B	14	63.121	47.099	116.638	1.00	0.00
	ATOM	96	C	LEU	B	14	62.692	46.849	115.199	1.00	0.00
	ATOM	97	O	LEU	B	14	63.395	47.225	114.262	1.00	0.00
15	ATOM	98	CB	LEU	B	14	62.885	48.573	116.986	1.00	0.00
	ATOM	99	CG	LEU	B	14	63.084	48.942	118.464	1.00	0.00
	ATOM	100	CD1	LEU	B	14	62.815	50.442	118.614	1.00	0.00
	ATOM	101	CD2	LEU	B	14	62.133	48.179	119.395	1.00	0.00
	ATOM	102	N	MET	B	15	61.529	46.218	115.031	1.00	0.00
20	ATOM	103	CA	MET	B	15	60.923	45.967	113.742	1.00	0.00
	ATOM	104	C	MET	B	15	60.052	47.169	113.382	1.00	0.00
	ATOM	105	O	MET	B	15	59.158	47.553	114.136	1.00	0.00
	ATOM	106	CB	MET	B	15	60.169	44.634	113.790	1.00	0.00
	ATOM	107	CG	MET	B	15	59.562	44.259	112.439	1.00	0.00
25	ATOM	108	SD	MET	B	15	60.799	43.952	111.157	1.00	0.00
	ATOM	109	CE	MET	B	15	59.713	43.847	109.718	1.00	0.00
	ATOM	110	N	ASN	B	16	60.354	47.791	112.243	1.00	0.00
	ATOM	111	CA	ASN	B	16	59.724	49.015	111.783	1.00	0.00
	ATOM	112	C	ASN	B	16	58.766	48.650	110.656	1.00	0.00

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	ATOM	113	O	ASN	B	16	59.209	48.298	109.564	1.00	0.00
	ATOM	114	CB	ASN	B	16	60.802	49.996	111.297	1.00	0.00
	ATOM	115	CG	ASN	B	16	61.877	50.323	112.336	1.00	0.00
	ATOM	116	OD1	ASN	B	16	63.011	50.616	111.971	1.00	0.00
5	ATOM	117	ND2	ASN	B	16	61.549	50.284	113.630	1.00	0.00
	ATOM	118	N	LEU	B	17	57.456	48.717	110.918	1.00	0.00
	ATOM	119	CA	LEU	B	17	56.438	48.397	109.923	1.00	0.00
	ATOM	120	C	LEU	B	17	56.387	49.452	108.821	1.00	0.00
	ATOM	121	O	LEU	B	17	55.999	49.145	107.698	1.00	0.00
10	ATOM	122	CB	LEU	B	17	55.051	48.276	110.564	1.00	0.00
	ATOM	123	CG	LEU	B	17	54.960	47.287	111.732	1.00	0.00
	ATOM	124	CD1	LEU	B	17	53.493	47.195	112.163	1.00	0.00
	ATOM	125	CD2	LEU	B	17	55.473	45.888	111.366	1.00	0.00
	ATOM	126	N	THR	B	18	56.765	50.693	109.143	1.00	0.00
15	ATOM	127	CA	THR	B	18	56.831	51.785	108.189	1.00	0.00
	ATOM	128	C	THR	B	18	57.784	51.424	107.050	1.00	0.00
	ATOM	129	O	THR	B	18	57.392	51.435	105.885	1.00	0.00
	ATOM	130	CB	THR	B	18	57.282	53.059	108.919	1.00	0.00
	ATOM	131	OG1	THR	B	18	58.410	52.776	109.726	1.00	0.00
20	ATOM	132	CG2	THR	B	18	56.167	53.579	109.826	1.00	0.00
	ATOM	133	N	THR	B	19	59.034	51.103	107.392	1.00	0.00
	ATOM	134	CA	THR	B	19	60.083	50.811	106.427	1.00	0.00
	ATOM	135	C	THR	B	19	60.198	49.319	106.109	1.00	0.00
	ATOM	136	O	THR	B	19	60.966	48.956	105.220	1.00	0.00
25	ATOM	137	CB	THR	B	19	61.409	51.379	106.947	1.00	0.00

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5	ATOM	138	OG1	THR	B	19	61.640	50.958	108.276	1.00	0.00
	ATOM	139	CG2	THR	B	19	61.374	52.910	106.916	1.00	0.00
	ATOM	140	N	SER	B	20	59.464	48.453	106.816	1.00	0.00
	ATOM	141	CA	SER	B	20	59.543	47.010	106.651	1.00	0.00
	ATOM	142	C	SER	B	20	60.995	46.560	106.819	1.00	0.00
10	ATOM	143	O	SER	B	20	61.619	46.063	105.880	1.00	0.00
	ATOM	144	CB	SER	B	20	58.930	46.591	105.307	1.00	0.00
	ATOM	145	OG	SER	B	20	57.594	47.045	105.233	1.00	0.00
	ATOM	146	N	SER	B	21	61.545	46.768	108.018	1.00	0.00
	ATOM	147	CA	SER	B	21	62.934	46.447	108.295	1.00	0.00
15	ATOM	148	C	SER	B	21	63.174	46.354	109.797	1.00	0.00
	ATOM	149	O	SER	B	21	62.561	47.080	110.578	1.00	0.00
	ATOM	150	CB	SER	B	21	63.854	47.492	107.649	1.00	0.00
	ATOM	151	OG	SER	B	21	63.497	48.800	108.054	1.00	0.00
	ATOM	152	N	LEU	B	22	64.079	45.454	110.189	1.00	0.00
20	ATOM	153	CA	LEU	B	22	64.548	45.313	111.555	1.00	0.00
	ATOM	154	C	LEU	B	22	65.774	46.211	111.697	1.00	0.00
	ATOM	155	O	LEU	B	22	66.831	45.867	111.174	1.00	0.00
	ATOM	156	CB	LEU	B	22	64.878	43.833	111.809	1.00	0.00
	ATOM	157	CG	LEU	B	22	65.296	43.529	113.256	1.00	0.00
25	ATOM	158	CD1	LEU	B	22	64.072	43.477	114.177	1.00	0.00
	ATOM	159	CD2	LEU	B	22	66.015	42.177	113.312	1.00	0.00
	ATOM	160	N	ILE	B	23	65.646	47.360	112.371	1.00	0.00
	ATOM	161	CA	ILE	B	23	66.801	48.187	112.709	1.00	0.00
	ATOM	162	C	ILE	B	23	67.391	47.656	114.011	1.00	0.00

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	ATOM	163	O	ILE	B	23	66.633	47.377	114.935	1.00	0.00
	ATOM	164	CB	ILE	B	23	66.444	49.686	112.773	1.00	0.00
	ATOM	165	CG1	ILE	B	23	67.738	50.511	112.913	1.00	0.00
	ATOM	166	CG2	ILE	B	23	65.461	50.027	113.904	1.00	0.00
5	ATOM	167	CD1	ILE	B	23	67.510	52.014	112.728	1.00	0.00
	ATOM	168	N	CYS	B	24	68.719	47.503	114.078	1.00	0.00
	ATOM	169	CA	CYS	B	24	69.437	47.077	115.273	1.00	0.00
	ATOM	170	C	CYS	B	24	70.515	48.105	115.593	1.00	0.00
	ATOM	171	O	CYS	B	24	71.184	48.576	114.676	1.00	0.00
10	ATOM	172	CB	CYS	B	24	70.068	45.702	115.056	1.00	0.00
	ATOM	173	SG	CYS	B	24	68.935	44.314	114.782	1.00	0.00
	ATOM	174	N	GLN	B	25	70.682	48.440	116.878	1.00	0.00
	ATOM	175	CA	GLN	B	25	71.666	49.398	117.367	1.00	0.00
	ATOM	176	C	GLN	B	25	72.431	48.820	118.553	1.00	0.00
15	ATOM	177	O	GLN	B	25	71.936	47.912	119.220	1.00	0.00
	ATOM	178	CB	GLN	B	25	70.985	50.722	117.734	1.00	0.00
	ATOM	179	CG	GLN	B	25	69.957	50.596	118.865	1.00	0.00
	ATOM	180	CD	GLN	B	25	69.312	51.950	119.143	1.00	0.00
	ATOM	181	OE1	GLN	B	25	68.498	52.424	118.356	1.00	0.00
20	ATOM	182	NE2	GLN	B	25	69.678	52.589	120.254	1.00	0.00
	ATOM	183	N	TRP	B	26	73.631	49.353	118.807	1.00	0.00
	ATOM	184	CA	TRP	B	26	74.508	48.907	119.882	1.00	0.00
	ATOM	185	C	TRP	B	26	75.373	50.060	120.392	1.00	0.00
	ATOM	186	O	TRP	B	26	75.435	51.131	119.789	1.00	0.00
25	ATOM	187	CB	TRP	B	26	75.406	47.773	119.373	1.00	0.00

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	ATOM	188	CG	TRP	B	26	76.210	48.151	118.170	1.00	0.00
	ATOM	189	CD1	TRP	B	26	77.401	48.792	118.178	1.00	0.00
	ATOM	190	CD2	TRP	B	26	75.834	48.023	116.771	1.00	0.00
	ATOM	191	NE1	TRP	B	26	77.789	49.078	116.887	1.00	0.00
5	ATOM	192	CE2	TRP	B	26	76.849	48.633	115.982	1.00	0.00
	ATOM	193	CE3	TRP	B	26	74.730	47.464	116.090	1.00	0.00
	ATOM	194	CZ2	TRP	B	26	76.771	48.694	114.588	1.00	0.00
	ATOM	195	CZ3	TRP	B	26	74.658	47.492	114.686	1.00	0.00
	ATOM	196	CH2	TRP	B	26	75.676	48.108	113.936	1.00	0.00
10	ATOM	197	N	GLU	B	27	76.069	49.780	121.495	1.00	0.00
	ATOM	198	CA	GLU	B	27	77.060	50.601	122.167	1.00	0.00
	ATOM	199	C	GLU	B	27	78.439	50.039	121.799	1.00	0.00
	ATOM	200	O	GLU	B	27	78.758	48.930	122.226	1.00	0.00
	ATOM	201	CB	GLU	B	27	76.787	50.482	123.677	1.00	0.00
15	ATOM	202	CG	GLU	B	27	77.913	50.956	124.605	1.00	0.00
	ATOM	203	CD	GLU	B	27	78.107	52.461	124.554	1.00	0.00
	ATOM	204	OE1	GLU	B	27	77.540	53.131	125.444	1.00	0.00
	ATOM	205	OE2	GLU	B	27	78.820	52.905	123.628	1.00	0.00
	ATOM	206	N	PRO	B	28	79.259	50.746	121.004	1.00	0.00
20	ATOM	207	CA	PRO	B	28	80.578	50.274	120.601	1.00	0.00
	ATOM	208	C	PRO	B	28	81.629	50.426	121.707	1.00	0.00
	ATOM	209	O	PRO	B	28	82.704	49.836	121.597	1.00	0.00
	ATOM	210	CB	PRO	B	28	80.944	51.107	119.373	1.00	0.00
	ATOM	211	CG	PRO	B	28	80.225	52.429	119.624	1.00	0.00
25	ATOM	212	CD	PRO	B	28	78.945	52.003	120.344	1.00	0.00

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	ATOM	213	N	GLY	B	29	81.349	51.205	122.761	1.00	0.00
	ATOM	214	CA	GLY	B	29	82.285	51.381	123.858	1.00	0.00
	ATOM	215	C	GLY	B	29	83.442	52.313	123.472	1.00	0.00
	ATOM	216	O	GLY	B	29	83.272	53.176	122.612	1.00	0.00
5	ATOM	217	N	PRO	B	30	84.609	52.171	124.126	1.00	0.00
	ATOM	218	CA	PRO	B	30	85.747	53.073	123.992	1.00	0.00
	ATOM	219	C	PRO	B	30	86.246	53.282	122.560	1.00	0.00
	ATOM	220	O	PRO	B	30	86.358	52.333	121.785	1.00	0.00
	ATOM	221	CB	PRO	B	30	86.852	52.469	124.861	1.00	0.00
10	ATOM	222	CG	PRO	B	30	86.069	51.751	125.957	1.00	0.00
	ATOM	223	CD	PRO	B	30	84.845	51.226	125.207	1.00	0.00
	ATOM	224	N	GLU	B	31	86.600	54.534	122.245	1.00	0.00
	ATOM	225	CA	GLU	B	31	87.250	54.925	121.002	1.00	0.00
	ATOM	226	C	GLU	B	31	88.552	54.134	120.831	1.00	0.00
15	ATOM	227	O	GLU	B	31	89.317	53.999	121.786	1.00	0.00
	ATOM	228	CB	GLU	B	31	87.512	56.439	121.059	1.00	0.00
	ATOM	229	CG	GLU	B	31	88.161	57.012	119.793	1.00	0.00
	ATOM	230	CD	GLU	B	31	87.279	56.846	118.562	1.00	0.00
	ATOM	231	OE1	GLU	B	31	86.107	57.273	118.641	1.00	0.00
20	ATOM	232	OE2	GLU	B	31	87.800	56.290	117.571	1.00	0.00
	ATOM	233	N	THR	B	32	88.799	53.604	119.626	1.00	0.00
	ATOM	234	CA	THR	B	32	89.973	52.787	119.332	1.00	0.00
	ATOM	235	C	THR	B	32	91.095	53.596	118.684	1.00	0.00
	ATOM	236	O	THR	B	32	92.244	53.155	118.715	1.00	0.00
25	ATOM	237	CB	THR	B	32	89.600	51.610	118.423	1.00	0.00

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	ATOM	238	OG1	THR	B	32	89.045	52.067	117.207	1.00	0.00
	ATOM	239	CG2	THR	B	32	88.627	50.655	119.117	1.00	0.00
	ATOM	240	N	HIS	B	33	90.760	54.735	118.059	1.00	0.00
	ATOM	241	CA	HIS	B	33	91.660	55.556	117.255	1.00	0.00
5	ATOM	242	C	HIS	B	33	92.133	54.859	115.980	1.00	0.00
	ATOM	243	O	HIS	B	33	93.035	55.365	115.314	1.00	0.00
	ATOM	244	CB	HIS	B	33	92.833	56.099	118.086	1.00	0.00
	ATOM	245	CG	HIS	B	33	92.378	57.117	119.087	1.00	0.00
	ATOM	246	ND1	HIS	B	33	91.872	58.345	118.694	1.00	0.00
10	ATOM	247	CD2	HIS	B	33	92.306	57.109	120.458	1.00	0.00
	ATOM	248	CE1	HIS	B	33	91.548	59.015	119.810	1.00	0.00
	ATOM	249	NE2	HIS	B	33	91.803	58.320	120.921	1.00	0.00
	ATOM	250	N	LEU	B	34	91.512	53.732	115.615	1.00	0.00
	ATOM	251	CA	LEU	B	34	91.819	53.004	114.397	1.00	0.00
15	ATOM	252	C	LEU	B	34	90.592	52.997	113.492	1.00	0.00
	ATOM	253	O	LEU	B	34	89.471	53.063	113.997	1.00	0.00
	ATOM	254	CB	LEU	B	34	92.204	51.566	114.743	1.00	0.00
	ATOM	255	CG	LEU	B	34	93.555	51.476	115.459	1.00	0.00
	ATOM	256	CD1	LEU	B	34	93.701	50.072	116.043	1.00	0.00
20	ATOM	257	CD2	LEU	B	34	94.723	51.754	114.504	1.00	0.00
	ATOM	258	N	PRO	B	35	90.780	52.875	112.166	1.00	0.00
	ATOM	259	CA	PRO	B	35	89.694	52.610	111.238	1.00	0.00
	ATOM	260	C	PRO	B	35	89.053	51.275	111.619	1.00	0.00
	ATOM	261	O	PRO	B	35	89.682	50.228	111.468	1.00	0.00
25	ATOM	262	CB	PRO	B	35	90.326	52.560	109.839	1.00	0.00

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	ATOM	263	CG	PRO	B	35	91.698	53.206	110.015	1.00	0.00
	ATOM	264	CD	PRO	B	35	92.053	52.894	111.464	1.00	0.00
	ATOM	265	N	THR	B	36	87.835	51.318	112.166	1.00	0.00
	ATOM	266	CA	THR	B	36	87.184	50.166	112.772	1.00	0.00
5	ATOM	267	C	THR	B	36	85.862	49.883	112.063	1.00	0.00
	ATOM	268	O	THR	B	36	85.095	50.806	111.791	1.00	0.00
	ATOM	269	CB	THR	B	36	87.056	50.398	114.288	1.00	0.00
	ATOM	270	OG1	THR	B	36	86.505	49.257	114.911	1.00	0.00
	ATOM	271	CG2	THR	B	36	86.230	51.638	114.652	1.00	0.00
10	ATOM	272	N	SER	B	37	85.622	48.612	111.718	1.00	0.00
	ATOM	273	CA	SER	B	37	84.429	48.174	111.011	1.00	0.00
	ATOM	274	C	SER	B	37	83.497	47.466	111.985	1.00	0.00
	ATOM	275	O	SER	B	37	83.957	46.785	112.901	1.00	0.00
	ATOM	276	CB	SER	B	37	84.808	47.248	109.850	1.00	0.00
15	ATOM	277	OG	SER	B	37	85.291	46.011	110.331	1.00	0.00
	ATOM	278	N	PHE	B	38	82.189	47.619	111.765	1.00	0.00
	ATOM	279	CA	PHE	B	38	81.157	46.909	112.500	1.00	0.00
	ATOM	280	C	PHE	B	38	80.371	46.062	111.507	1.00	0.00
	ATOM	281	O	PHE	B	38	80.129	46.505	110.392	1.00	0.00
20	ATOM	282	CB	PHE	B	38	80.270	47.904	113.249	1.00	0.00
	ATOM	283	CG	PHE	B	38	80.970	48.527	114.439	1.00	0.00
	ATOM	284	CD1	PHE	B	38	81.778	49.666	114.267	1.00	0.00
	ATOM	285	CD2	PHE	B	38	80.913	47.894	115.695	1.00	0.00
	ATOM	286	CE1	PHE	B	38	82.529	50.166	115.344	1.00	0.00
25	ATOM	287	CE2	PHE	B	38	81.652	48.406	116.775	1.00	0.00

	ATOM	288	CZ	PHE	B	38	82.479	49.527	116.593	1.00	0.00
	ATOM	289	N	THR	B	39	79.999	44.835	111.873	1.00	0.00
	ATOM	290	CA	THR	B	39	79.218	43.962	111.010	1.00	0.00
	ATOM	291	C	THR	B	39	78.112	43.323	111.844	1.00	0.00
5	ATOM	292	O	THR	B	39	78.383	42.520	112.737	1.00	0.00
	ATOM	293	CB	THR	B	39	80.123	42.941	110.296	1.00	0.00
	ATOM	294	OG1	THR	B	39	80.826	42.145	111.221	1.00	0.00
	ATOM	295	CG2	THR	B	39	81.154	43.632	109.396	1.00	0.00
	ATOM	296	N	LEU	B	40	76.860	43.703	111.565	1.00	0.00
10	ATOM	297	CA	LEU	B	40	75.697	43.041	112.124	1.00	0.00
	ATOM	298	C	LEU	B	40	75.531	41.730	111.355	1.00	0.00
	ATOM	299	O	LEU	B	40	75.362	41.745	110.134	1.00	0.00
	ATOM	300	CB	LEU	B	40	74.474	43.960	112.015	1.00	0.00
	ATOM	301	CG	LEU	B	40	73.210	43.384	112.673	1.00	0.00
15	ATOM	302	CD1	LEU	B	40	73.299	43.523	114.197	1.00	0.00
	ATOM	303	CD2	LEU	B	40	71.966	44.127	112.172	1.00	0.00
	ATOM	304	N	LYS	B	41	75.637	40.608	112.075	1.00	0.00
	ATOM	305	CA	LYS	B	41	75.591	39.258	111.534	1.00	0.00
	ATOM	306	C	LYS	B	41	74.442	38.489	112.168	1.00	0.00
20	ATOM	307	O	LYS	B	41	74.128	38.711	113.339	1.00	0.00
	ATOM	308	CB	LYS	B	41	76.891	38.522	111.862	1.00	0.00
	ATOM	309	CG	LYS	B	41	78.087	39.087	111.095	1.00	0.00
	ATOM	310	CD	LYS	B	41	79.036	37.942	110.729	1.00	0.00
	ATOM	311	CE	LYS	B	41	80.215	38.490	109.926	1.00	0.00
25	ATOM	312	NZ	LYS	B	41	81.136	37.421	109.505	1.00	0.00

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5	ATOM	313	N	SER	B	42	73.847	37.558	111.412	1.00	0.00
	ATOM	314	CA	SER	B	42	72.762	36.739	111.918	1.00	0.00
	ATOM	315	C	SER	B	42	72.506	35.496	111.066	1.00	0.00
	ATOM	316	O	SER	B	42	72.947	35.401	109.919	1.00	0.00
	ATOM	317	CB	SER	B	42	71.489	37.588	112.041	1.00	0.00
10	ATOM	318	OG	SER	B	42	71.138	38.145	110.792	1.00	0.00
	ATOM	319	N	PHE	B	43	71.756	34.552	111.645	1.00	0.00
	ATOM	320	CA	PHE	B	43	71.223	33.381	110.966	1.00	0.00
	ATOM	321	C	PHE	B	43	69.829	33.072	111.517	1.00	0.00
	ATOM	322	O	PHE	B	43	69.562	33.312	112.696	1.00	0.00
15	ATOM	323	CB	PHE	B	43	72.176	32.184	111.103	1.00	0.00
	ATOM	324	CG	PHE	B	43	72.501	31.758	112.520	1.00	0.00
	ATOM	325	CD1	PHE	B	43	71.681	30.845	113.206	1.00	0.00
	ATOM	326	CD2	PHE	B	43	73.684	32.208	113.123	1.00	0.00
	ATOM	327	CE1	PHE	B	43	71.996	30.461	114.520	1.00	0.00
20	ATOM	328	CE2	PHE	B	43	74.015	31.810	114.429	1.00	0.00
	ATOM	329	CZ	PHE	B	43	73.157	30.954	115.138	1.00	0.00
	ATOM	330	N	LYS	B	44	68.941	32.552	110.663	1.00	0.00
	ATOM	331	CA	LYS	B	44	67.618	32.076	111.046	1.00	0.00
	ATOM	332	C	LYS	B	44	67.784	30.842	111.931	1.00	0.00
25	ATOM	333	O	LYS	B	44	68.685	30.040	111.703	1.00	0.00
	ATOM	334	CB	LYS	B	44	66.792	31.739	109.794	1.00	0.00
	ATOM	335	CG	LYS	B	44	66.532	32.988	108.938	1.00	0.00
	ATOM	336	CD	LYS	B	44	65.606	32.726	107.742	1.00	0.00
	ATOM	337	CE	LYS	B	44	66.253	31.792	106.715	1.00	0.00

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5	ATOM	338	NZ	LYS	B	44	65.483	31.696	105.462	1.00	0.00
	ATOM	339	N	SER	B	45	66.944	30.702	112.958	1.00	0.00
	ATOM	340	CA	SER	B	45	67.108	29.704	114.003	1.00	0.00
	ATOM	341	C	SER	B	45	65.734	29.253	114.515	1.00	0.00
	ATOM	342	O	SER	B	45	64.744	29.333	113.791	1.00	0.00
10	ATOM	343	CB	SER	B	45	67.988	30.323	115.101	1.00	0.00
	ATOM	344	OG	SER	B	45	68.337	29.373	116.082	1.00	0.00
	ATOM	345	N	ARG	B	46	65.683	28.763	115.759	1.00	0.00
	ATOM	346	CA	ARG	B	46	64.480	28.366	116.480	1.00	0.00
	ATOM	347	C	ARG	B	46	64.560	28.934	117.904	1.00	0.00
15	ATOM	348	O	ARG	B	46	65.469	29.705	118.214	1.00	0.00
	ATOM	349	CB	ARG	B	46	64.370	26.834	116.516	1.00	0.00
	ATOM	350	CG	ARG	B	46	64.219	26.177	115.138	1.00	0.00
	ATOM	351	CD	ARG	B	46	64.101	24.665	115.359	1.00	0.00
	ATOM	352	NE	ARG	B	46	63.966	23.915	114.104	1.00	0.00
20	ATOM	353	CZ	ARG	B	46	64.114	22.582	114.008	1.00	0.00
	ATOM	354	NH1	ARG	B	46	64.496	21.861	115.072	1.00	0.00
	ATOM	355	NH2	ARG	B	46	63.874	21.966	112.844	1.00	0.00
	ATOM	356	N	GLY	B	47	63.625	28.544	118.780	1.00	0.00
	ATOM	357	CA	GLY	B	47	63.600	28.950	120.179	1.00	0.00
25	ATOM	358	C	GLY	B	47	64.928	28.662	120.883	1.00	0.00
	ATOM	359	O	GLY	B	47	65.586	27.664	120.590	1.00	0.00
	ATOM	360	N	ASN	B	48	65.338	29.575	121.775	1.00	0.00
	ATOM	361	CA	ASN	B	48	66.609	29.553	122.500	1.00	0.00
	ATOM	362	C	ASN	B	48	67.833	29.698	121.585	1.00	0.00

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	ATOM	363	O	ASN	B	48	68.962	29.619	122.063	1.00	0.00
	ATOM	364	CB	ASN	B	48	66.724	28.310	123.399	1.00	0.00
	ATOM	365	CG	ASN	B	48	65.545	28.185	124.359	1.00	0.00
	ATOM	366	OD1	ASN	B	48	64.628	27.403	124.125	1.00	0.00
5	ATOM	367	ND2	ASN	B	48	65.559	28.959	125.445	1.00	0.00
	ATOM	368	N	CYS	B	49	67.615	29.917	120.283	1.00	0.00
	ATOM	369	CA	CYS	B	49	68.623	30.063	119.247	1.00	0.00
	ATOM	370	C	CYS	B	49	69.770	29.051	119.314	1.00	0.00
	ATOM	371	O	CYS	B	49	70.926	29.416	119.115	1.00	0.00
10	ATOM	372	CB	CYS	B	49	69.115	31.511	119.119	1.00	0.00
	ATOM	373	SG	CYS	B	49	67.893	32.679	118.477	1.00	0.00
	ATOM	374	N	GLN	B	50	69.456	27.768	119.526	1.00	0.00
	ATOM	375	CA	GLN	B	50	70.445	26.698	119.422	1.00	0.00
	ATOM	376	C	GLN	B	50	70.541	26.180	117.984	1.00	0.00
15	ATOM	377	O	GLN	B	50	71.624	25.809	117.537	1.00	0.00
	ATOM	378	CB	GLN	B	50	70.120	25.564	120.406	1.00	0.00
	ATOM	379	CG	GLN	B	50	70.382	25.965	121.866	1.00	0.00
	ATOM	380	CD	GLN	B	50	71.865	26.210	122.148	1.00	0.00
	ATOM	381	OE1	GLN	B	50	72.337	27.341	122.076	1.00	0.00
20	ATOM	382	NE2	GLN	B	50	72.611	25.155	122.474	1.00	0.00
	ATOM	383	N	THR	B	51	69.417	26.134	117.258	1.00	0.00
	ATOM	384	CA	THR	B	51	69.355	25.532	115.932	1.00	0.00
	ATOM	385	C	THR	B	51	70.060	26.414	114.900	1.00	0.00
	ATOM	386	O	THR	B	51	69.592	27.501	114.572	1.00	0.00
25	ATOM	387	CB	THR	B	51	67.895	25.260	115.557	1.00	0.00

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	ATOM	388	OG1	THR	B	51	67.341	24.377	116.512	1.00	0.00
	ATOM	389	CG2	THR	B	51	67.778	24.611	114.174	1.00	0.00
	ATOM	390	N	GLN	B	52	71.183	25.933	114.372	1.00	0.00
	ATOM	391	CA	GLN	B	52	72.024	26.658	113.431	1.00	0.00
5	ATOM	392	C	GLN	B	52	71.419	26.626	112.022	1.00	0.00
	ATOM	393	O	GLN	B	52	71.916	25.919	111.147	1.00	0.00
	ATOM	394	CB	GLN	B	52	73.420	26.021	113.474	1.00	0.00
	ATOM	395	CG	GLN	B	52	74.212	26.418	114.735	1.00	0.00
	ATOM	396	CD	GLN	B	52	74.940	27.763	114.649	1.00	0.00
10	ATOM	397	OE1	GLN	B	52	75.132	28.426	115.664	1.00	0.00
	ATOM	398	NE2	GLN	B	52	75.392	28.172	113.463	1.00	0.00
	ATOM	399	N	GLY	B	53	70.350	27.396	111.793	1.00	0.00
	ATOM	400	CA	GLY	B	53	69.713	27.488	110.486	1.00	0.00
	ATOM	401	C	GLY	B	53	70.441	28.459	109.549	1.00	0.00
15	ATOM	402	O	GLY	B	53	71.558	28.896	109.828	1.00	0.00
	ATOM	403	N	ASP	B	54	69.797	28.769	108.418	1.00	0.00
	ATOM	404	CA	ASP	B	54	70.339	29.527	107.295	1.00	0.00
	ATOM	405	C	ASP	B	54	70.948	30.868	107.705	1.00	0.00
	ATOM	406	O	ASP	B	54	70.288	31.678	108.354	1.00	0.00
20	ATOM	407	CB	ASP	B	54	69.213	29.834	106.303	1.00	0.00
	ATOM	408	CG	ASP	B	54	68.629	28.627	105.581	1.00	0.00
	ATOM	409	OD1	ASP	B	54	68.291	28.807	104.392	1.00	0.00
	ATOM	410	OD2	ASP	B	54	68.478	27.574	106.237	1.00	0.00
	ATOM	411	N	SER	B	55	72.173	31.137	107.242	1.00	0.00
25	ATOM	412	CA	SER	B	55	72.820	32.436	107.357	1.00	0.00

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	ATOM	413	C	SER	B	55	72.005	33.522	106.651	1.00	0.00
	ATOM	414	O	SER	B	55	71.537	33.319	105.532	1.00	0.00
	ATOM	415	CB	SER	B	55	74.227	32.357	106.761	1.00	0.00
	ATOM	416	OG	SER	B	55	74.946	31.300	107.364	1.00	0.00
5	ATOM	417	N	ILE	B	56	71.863	34.680	107.302	1.00	0.00
	ATOM	418	CA	ILE	B	56	71.261	35.883	106.744	1.00	0.00
	ATOM	419	C	ILE	B	56	72.419	36.787	106.310	1.00	0.00
	ATOM	420	O	ILE	B	56	73.482	36.761	106.929	1.00	0.00
	ATOM	421	CB	ILE	B	56	70.366	36.542	107.812	1.00	0.00
10	ATOM	422	CG1	ILE	B	56	69.263	35.572	108.279	1.00	0.00
	ATOM	423	CG2	ILE	B	56	69.723	37.827	107.273	1.00	0.00
	ATOM	424	CD1	ILE	B	56	68.629	36.011	109.600	1.00	0.00
	ATOM	425	N	LEU	B	57	72.238	37.554	105.229	1.00	0.00
	ATOM	426	CA	LEU	B	57	73.295	38.374	104.648	1.00	0.00
15	ATOM	427	C	LEU	B	57	73.798	39.403	105.666	1.00	0.00
	ATOM	428	O	LEU	B	57	72.995	40.000	106.384	1.00	0.00
	ATOM	429	CB	LEU	B	57	72.788	39.089	103.385	1.00	0.00
	ATOM	430	CG	LEU	B	57	72.641	38.180	102.151	1.00	0.00
	ATOM	431	CD1	LEU	B	57	71.489	37.172	102.271	1.00	0.00
20	ATOM	432	CD2	LEU	B	57	72.399	39.057	100.916	1.00	0.00
	ATOM	433	N	ASP	B	58	75.121	39.615	105.714	1.00	0.00
	ATOM	434	CA	ASP	B	58	75.738	40.577	106.620	1.00	0.00
	ATOM	435	C	ASP	B	58	75.212	41.983	106.336	1.00	0.00
	ATOM	436	O	ASP	B	58	75.027	42.365	105.180	1.00	0.00
25	ATOM	437	CB	ASP	B	58	77.269	40.590	106.472	1.00	0.00

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	ATOM	438	CG	ASP	B	58	77.986	39.352	107.004	1.00	0.00
	ATOM	439	OD1	ASP	B	58	77.358	38.578	107.758	1.00	0.00
	ATOM	440	OD2	ASP	B	58	79.185	39.219	106.675	1.00	0.00
	ATOM	441	N	CYS	B	59	75.010	42.757	107.403	1.00	0.00
5	ATOM	442	CA	CYS	B	59	74.676	44.168	107.335	1.00	0.00
	ATOM	443	C	CYS	B	59	75.861	44.926	107.927	1.00	0.00
	ATOM	444	O	CYS	B	59	76.084	44.880	109.135	1.00	0.00
	ATOM	445	CB	CYS	B	59	73.354	44.409	108.076	1.00	0.00
	ATOM	446	SG	CYS	B	59	72.630	46.070	107.970	1.00	0.00
10	ATOM	447	N	VAL	B	60	76.639	45.605	107.078	1.00	0.00
	ATOM	448	CA	VAL	B	60	77.728	46.466	107.518	1.00	0.00
	ATOM	449	C	VAL	B	60	77.138	47.879	107.610	1.00	0.00
	ATOM	450	O	VAL	B	60	76.549	48.345	106.636	1.00	0.00
	ATOM	451	CB	VAL	B	60	78.955	46.339	106.586	1.00	0.00
15	ATOM	452	CG1	VAL	B	60	79.174	44.882	106.150	1.00	0.00
	ATOM	453	CG2	VAL	B	60	78.905	47.220	105.331	1.00	0.00
	ATOM	454	N	PRO	B	61	77.199	48.570	108.755	1.00	0.00
	ATOM	455	CA	PRO	B	61	76.640	49.894	108.876	1.00	0.00
	ATOM	456	C	PRO	B	61	77.567	50.862	108.154	1.00	0.00
20	ATOM	457	O	PRO	B	61	78.589	50.486	107.578	1.00	0.00
	ATOM	458	CB	PRO	B	61	76.608	50.169	110.377	1.00	0.00
	ATOM	459	CG	PRO	B	61	77.886	49.491	110.848	1.00	0.00
	ATOM	460	CD	PRO	B	61	78.040	48.305	109.896	1.00	0.00
	ATOM	461	N	LYS	B	62	77.200	52.132	108.213	1.00	0.00
25	ATOM	462	CA	LYS	B	62	78.004	53.209	107.687	1.00	0.00

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	ATOM	463	C	LYS	B	62	78.974	53.673	108.774	1.00	0.00
	ATOM	464	O	LYS	B	62	78.816	53.319	109.943	1.00	0.00
	ATOM	465	CB	LYS	B	62	77.056	54.323	107.233	1.00	0.00
	ATOM	466	CG	LYS	B	62	76.004	53.844	106.217	1.00	0.00
5	ATOM	467	CD	LYS	B	62	76.636	53.360	104.904	1.00	0.00
	ATOM	468	CE	LYS	B	62	75.549	53.047	103.869	1.00	0.00
	ATOM	469	NZ	LYS	B	62	76.116	52.875	102.518	1.00	0.00
	ATOM	470	N	ASP	B	63	79.980	54.467	108.391	1.00	0.00
	ATOM	471	CA	ASP	B	63	80.913	55.042	109.349	1.00	0.00
10	ATOM	472	C	ASP	B	63	80.154	55.951	110.319	1.00	0.00
	ATOM	473	O	ASP	B	63	79.131	56.535	109.957	1.00	0.00
	ATOM	474	CB	ASP	B	63	82.025	55.800	108.614	1.00	0.00
	ATOM	475	CG	ASP	B	63	83.053	56.389	109.578	1.00	0.00
	ATOM	476	OD1	ASP	B	63	83.271	55.763	110.639	1.00	0.00
15	ATOM	477	OD2	ASP	B	63	83.598	57.459	109.237	1.00	0.00
	ATOM	478	N	GLY	B	64	80.619	56.024	111.569	1.00	0.00
	ATOM	479	CA	GLY	B	64	79.967	56.770	112.636	1.00	0.00
	ATOM	480	C	GLY	B	64	78.732	56.051	113.188	1.00	0.00
	ATOM	481	O	GLY	B	64	78.559	55.973	114.402	1.00	0.00
20	ATOM	482	N	GLN	B	65	77.855	55.555	112.307	1.00	0.00
	ATOM	483	CA	GLN	B	65	76.576	54.970	112.678	1.00	0.00
	ATOM	484	C	GLN	B	65	76.788	53.659	113.439	1.00	0.00
	ATOM	485	O	GLN	B	65	77.357	52.715	112.898	1.00	0.00
	ATOM	486	CB	GLN	B	65	75.726	54.761	111.413	1.00	0.00
25	ATOM	487	CG	GLN	B	65	75.258	56.088	110.796	1.00	0.00

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	ATOM	488	CD	GLN	B	65	74.095	56.699	111.577	1.00	0.00
	ATOM	489	OE1	GLN	B	65	74.284	57.270	112.647	1.00	0.00
	ATOM	490	NE2	GLN	B	65	72.880	56.574	111.048	1.00	0.00
	ATOM	491	N	SER	B	66	76.307	53.589	114.687	1.00	0.00
5	ATOM	492	CA	SER	B	66	76.364	52.388	115.515	1.00	0.00
	ATOM	493	C	SER	B	66	75.064	51.588	115.391	1.00	0.00
	ATOM	494	O	SER	B	66	74.558	51.072	116.389	1.00	0.00
	ATOM	495	CB	SER	B	66	76.630	52.784	116.973	1.00	0.00
	ATOM	496	OG	SER	B	66	77.813	53.550	117.060	1.00	0.00
10	ATOM	497	N	HIS	B	67	74.520	51.491	114.170	1.00	0.00
	ATOM	498	CA	HIS	B	67	73.292	50.764	113.895	1.00	0.00
	ATOM	499	C	HIS	B	67	73.227	50.360	112.422	1.00	0.00
	ATOM	500	O	HIS	B	67	73.765	51.060	111.566	1.00	0.00
	ATOM	501	CB	HIS	B	67	72.067	51.579	114.339	1.00	0.00
15	ATOM	502	CG	HIS	B	67	71.803	52.855	113.586	1.00	0.00
	ATOM	503	ND1	HIS	B	67	71.350	52.867	112.276	1.00	0.00
	ATOM	504	CD2	HIS	B	67	71.794	54.169	113.987	1.00	0.00
	ATOM	505	CE1	HIS	B	67	71.070	54.142	111.964	1.00	0.00
	ATOM	506	NE2	HIS	B	67	71.309	54.986	112.970	1.00	0.00
20	ATOM	507	N	CYS	B	68	72.564	49.233	112.138	1.00	0.00
	ATOM	508	CA	CYS	B	68	72.400	48.662	110.802	1.00	0.00
	ATOM	509	C	CYS	B	68	70.990	48.084	110.716	1.00	0.00
	ATOM	510	O	CYS	B	68	70.435	47.700	111.746	1.00	0.00
	ATOM	511	CB	CYS	B	68	73.472	47.587	110.554	1.00	0.00
25	ATOM	512	SG	CYS	B	68	73.981	47.367	108.830	1.00	0.00

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	ATOM	513	N	CYS	B	69	70.391	48.054	109.519	1.00	0.00
	ATOM	514	CA	CYS	B	69	69.021	47.590	109.334	1.00	0.00
	ATOM	515	C	CYS	B	69	68.943	46.444	108.329	1.00	0.00
	ATOM	516	O	CYS	B	69	69.516	46.516	107.243	1.00	0.00
5	ATOM	517	CB	CYS	B	69	68.082	48.753	108.985	1.00	0.00
	ATOM	518	SG	CYS	B	69	68.406	49.405	107.327	1.00	0.00
	ATOM	519	N	ILE	B	70	68.234	45.376	108.711	1.00	0.00
	ATOM	520	CA	ILE	B	70	68.000	44.208	107.879	1.00	0.00
	ATOM	521	C	ILE	B	70	66.630	44.387	107.215	1.00	0.00
10	ATOM	522	O	ILE	B	70	65.636	44.556	107.923	1.00	0.00
	ATOM	523	CB	ILE	B	70	68.058	42.919	108.721	1.00	0.00
	ATOM	524	CG1	ILE	B	70	69.397	42.826	109.478	1.00	0.00
	ATOM	525	CG2	ILE	B	70	67.869	41.705	107.798	1.00	0.00
	ATOM	526	CD1	ILE	B	70	69.524	41.560	110.331	1.00	0.00
15	ATOM	527	N	PRO	B	71	66.550	44.370	105.875	1.00	0.00
	ATOM	528	CA	PRO	B	71	65.310	44.574	105.145	1.00	0.00
	ATOM	529	C	PRO	B	71	64.424	43.328	105.205	1.00	0.00
	ATOM	530	O	PRO	B	71	64.925	42.206	105.278	1.00	0.00
	ATOM	531	CB	PRO	B	71	65.744	44.872	103.708	1.00	0.00
20	ATOM	532	CG	PRO	B	71	67.031	44.058	103.570	1.00	0.00
	ATOM	533	CD	PRO	B	71	67.660	44.193	104.954	1.00	0.00
	ATOM	534	N	ARG	B	72	63.102	43.533	105.135	1.00	0.00
	ATOM	535	CA	ARG	B	72	62.095	42.478	105.204	1.00	0.00
	ATOM	536	C	ARG	B	72	62.376	41.315	104.252	1.00	0.00
25	ATOM	537	O	ARG	B	72	62.088	40.169	104.592	1.00	0.00

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	ATOM	538	CB	ARG	B	72	60.708	43.094	104.973	1.00	0.00
	ATOM	539	CG	ARG	B	72	59.527	42.186	105.334	1.00	0.00
	ATOM	540	CD	ARG	B	72	59.119	41.235	104.204	1.00	0.00
	ATOM	541	NE	ARG	B	72	59.320	39.832	104.597	1.00	0.00
5	ATOM	542	CZ	ARG	B	72	58.382	38.873	104.684	1.00	0.00
	ATOM	543	NH1	ARG	B	72	57.094	39.124	104.406	1.00	0.00
	ATOM	544	NH2	ARG	B	72	58.750	37.640	105.056	1.00	0.00
	ATOM	545	N	LYS	B	73	62.939	41.597	103.070	1.00	0.00
	ATOM	546	CA	LYS	B	73	63.235	40.575	102.075	1.00	0.00
10	ATOM	547	C	LYS	B	73	64.201	39.505	102.599	1.00	0.00
	ATOM	548	O	LYS	B	73	64.123	38.358	102.171	1.00	0.00
	ATOM	549	CB	LYS	B	73	63.716	41.218	100.766	1.00	0.00
	ATOM	550	CG	LYS	B	73	65.151	41.755	100.829	1.00	0.00
	ATOM	551	CD	LYS	B	73	65.464	42.581	99.576	1.00	0.00
15	ATOM	552	CE	LYS	B	73	66.952	42.952	99.530	1.00	0.00
	ATOM	553	NZ	LYS	B	73	67.229	43.954	98.483	1.00	0.00
	ATOM	554	N	HIS	B	74	65.102	39.865	103.521	1.00	0.00
	ATOM	555	CA	HIS	B	74	66.007	38.913	104.153	1.00	0.00
	ATOM	556	C	HIS	B	74	65.316	38.178	105.306	1.00	0.00
20	ATOM	557	O	HIS	B	74	65.630	37.020	105.576	1.00	0.00
	ATOM	558	CB	HIS	B	74	67.255	39.643	104.663	1.00	0.00
	ATOM	559	CG	HIS	B	74	68.112	40.266	103.590	1.00	0.00
	ATOM	560	ND1	HIS	B	74	69.154	41.131	103.887	1.00	0.00
	ATOM	561	CD2	HIS	B	74	68.134	40.138	102.221	1.00	0.00
25	ATOM	562	CE1	HIS	B	74	69.685	41.535	102.722	1.00	0.00

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	ATOM	563	NE2	HIS	B	74	69.095	40.975	101.664	1.00	0.00
	ATOM	564	N	LEU	B	75	64.404	38.856	106.012	1.00	0.00
	ATOM	565	CA	LEU	B	75	63.818	38.352	107.245	1.00	0.00
	ATOM	566	C	LEU	B	75	62.786	37.252	106.988	1.00	0.00
5	ATOM	567	O	LEU	B	75	61.951	37.360	106.088	1.00	0.00
	ATOM	568	CB	LEU	B	75	63.151	39.496	108.023	1.00	0.00
	ATOM	569	CG	LEU	B	75	64.104	40.638	108.410	1.00	0.00
	ATOM	570	CD1	LEU	B	75	63.303	41.769	109.062	1.00	0.00
	ATOM	571	CD2	LEU	B	75	65.179	40.167	109.396	1.00	0.00
10	ATOM	572	N	LEU	B	76	62.810	36.230	107.851	1.00	0.00
	ATOM	573	CA	LEU	B	76	61.740	35.258	108.002	1.00	0.00
	ATOM	574	C	LEU	B	76	60.954	35.643	109.252	1.00	0.00
	ATOM	575	O	LEU	B	76	61.333	35.290	110.367	1.00	0.00
	ATOM	576	CB	LEU	B	76	62.325	33.845	108.108	1.00	0.00
15	ATOM	577	CG	LEU	B	76	61.263	32.765	108.386	1.00	0.00
	ATOM	578	CD1	LEU	B	76	60.219	32.681	107.267	1.00	0.00
	ATOM	579	CD2	LEU	B	76	61.949	31.406	108.552	1.00	0.00
	ATOM	580	N	LEU	B	77	59.868	36.390	109.058	1.00	0.00
	ATOM	581	CA	LEU	B	77	58.989	36.811	110.136	1.00	0.00
20	ATOM	582	C	LEU	B	77	58.314	35.584	110.756	1.00	0.00
	ATOM	583	O	LEU	B	77	58.016	34.629	110.040	1.00	0.00
	ATOM	584	CB	LEU	B	77	57.945	37.788	109.573	1.00	0.00
	ATOM	585	CG	LEU	B	77	58.554	39.010	108.858	1.00	0.00
	ATOM	586	CD1	LEU	B	77	57.427	39.882	108.299	1.00	0.00
25	ATOM	587	CD2	LEU	B	77	59.439	39.855	109.781	1.00	0.00

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	ATOM	588	N	TYR	B	78	58.073	35.617	112.072	1.00	0.00
	ATOM	589	CA	TYR	B	78	57.415	34.557	112.832	1.00	0.00
	ATOM	590	C	TYR	B	78	58.312	33.338	113.052	1.00	0.00
	ATOM	591	O	TYR	B	78	57.819	32.225	113.225	1.00	0.00
5	ATOM	592	CB	TYR	B	78	56.034	34.206	112.266	1.00	0.00
	ATOM	593	CG	TYR	B	78	55.114	35.404	112.219	1.00	0.00
	ATOM	594	CD1	TYR	B	78	54.505	35.852	113.405	1.00	0.00
	ATOM	595	CD2	TYR	B	78	54.939	36.126	111.024	1.00	0.00
	ATOM	596	CE1	TYR	B	78	53.679	36.987	113.386	1.00	0.00
10	ATOM	597	CE2	TYR	B	78	54.122	37.269	111.008	1.00	0.00
	ATOM	598	CZ	TYR	B	78	53.479	37.688	112.186	1.00	0.00
	ATOM	599	OH	TYR	B	78	52.680	38.791	112.176	1.00	0.00
	ATOM	600	N	GLN	B	79	59.629	33.555	113.081	1.00	0.00
	ATOM	601	CA	GLN	B	79	60.609	32.549	113.443	1.00	0.00
15	ATOM	602	C	GLN	B	79	61.769	33.267	114.119	1.00	0.00
	ATOM	603	O	GLN	B	79	62.046	34.424	113.808	1.00	0.00
	ATOM	604	CB	GLN	B	79	61.066	31.788	112.188	1.00	0.00
	ATOM	605	CG	GLN	B	79	62.044	30.646	112.493	1.00	0.00
	ATOM	606	CD	GLN	B	79	61.471	29.658	113.505	1.00	0.00
20	ATOM	607	OE1	GLN	B	79	61.664	29.814	114.709	1.00	0.00
	ATOM	608	NE2	GLN	B	79	60.747	28.647	113.028	1.00	0.00
	ATOM	609	N	ASN	B	80	62.444	32.584	115.045	1.00	0.00
	ATOM	610	CA	ASN	B	80	63.566	33.159	115.763	1.00	0.00
	ATOM	611	C	ASN	B	80	64.783	33.283	114.848	1.00	0.00
25	ATOM	612	O	ASN	B	80	64.960	32.491	113.924	1.00	0.00

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	ATOM	613	CB	ASN	B	80	63.908	32.301	116.981	1.00	0.00
	ATOM	614	CG	ASN	B	80	62.749	32.231	117.970	1.00	0.00
	ATOM	615	OD1	ASN	B	80	62.123	31.186	118.120	1.00	0.00
	ATOM	616	ND2	ASN	B	80	62.455	33.342	118.645	1.00	0.00
5	ATOM	617	N	MET	B	81	65.638	34.265	115.135	1.00	0.00
	ATOM	618	CA	MET	B	81	66.929	34.461	114.501	1.00	0.00
	ATOM	619	C	MET	B	81	67.926	34.893	115.575	1.00	0.00
	ATOM	620	O	MET	B	81	67.549	35.568	116.534	1.00	0.00
	ATOM	621	CB	MET	B	81	66.830	35.472	113.347	1.00	0.00
10	ATOM	622	CG	MET	B	81	66.215	36.818	113.755	1.00	0.00
	ATOM	623	SD	MET	B	81	65.897	37.966	112.389	1.00	0.00
	ATOM	624	CE	MET	B	81	67.573	38.473	111.948	1.00	0.00
	ATOM	625	N	GLY	B	82	69.185	34.471	115.415	1.00	0.00
	ATOM	626	CA	GLY	B	82	70.285	34.816	116.304	1.00	0.00
15	ATOM	627	C	GLY	B	82	71.062	35.971	115.682	1.00	0.00
	ATOM	628	O	GLY	B	82	71.442	35.864	114.520	1.00	0.00
	ATOM	629	N	ILE	B	83	71.266	37.069	116.424	1.00	0.00
	ATOM	630	CA	ILE	B	83	71.886	38.306	115.956	1.00	0.00
	ATOM	631	C	ILE	B	83	73.022	38.679	116.905	1.00	0.00
20	ATOM	632	O	ILE	B	83	72.831	38.667	118.117	1.00	0.00
	ATOM	633	CB	ILE	B	83	70.858	39.457	115.934	1.00	0.00
	ATOM	634	CG1	ILE	B	83	69.597	39.114	115.127	1.00	0.00
	ATOM	635	CG2	ILE	B	83	71.501	40.732	115.363	1.00	0.00
	ATOM	636	CD1	ILE	B	83	68.440	40.061	115.455	1.00	0.00
25	ATOM	637	N	TRP	B	84	74.181	39.061	116.365	1.00	0.00

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	ATOM	638	CA	TRP	B	84	75.271	39.643	117.135	1.00	0.00
	ATOM	639	C	TRP	B	84	75.982	40.671	116.261	1.00	0.00
	ATOM	640	O	TRP	B	84	75.744	40.734	115.055	1.00	0.00
	ATOM	641	CB	TRP	B	84	76.245	38.560	117.608	1.00	0.00
5	ATOM	642	CG	TRP	B	84	76.970	37.848	116.513	1.00	0.00
	ATOM	643	CD1	TRP	B	84	78.209	38.149	116.064	1.00	0.00
	ATOM	644	CD2	TRP	B	84	76.484	36.778	115.655	1.00	0.00
	ATOM	645	NE1	TRP	B	84	78.542	37.326	115.011	1.00	0.00
	ATOM	646	CE2	TRP	B	84	77.506	36.467	114.712	1.00	0.00
10	ATOM	647	CE3	TRP	B	84	75.277	36.054	115.561	1.00	0.00
	ATOM	648	CZ2	TRP	B	84	77.343	35.488	113.727	1.00	0.00
	ATOM	649	CZ3	TRP	B	84	75.088	35.096	114.551	1.00	0.00
	ATOM	650	CH2	TRP	B	84	76.123	34.809	113.641	1.00	0.00
	ATOM	651	N	VAL	B	85	76.857	41.467	116.876	1.00	0.00
15	ATOM	652	CA	VAL	B	85	77.651	42.483	116.206	1.00	0.00
	ATOM	653	C	VAL	B	85	79.108	42.051	116.290	1.00	0.00
	ATOM	654	O	VAL	B	85	79.523	41.529	117.321	1.00	0.00
	ATOM	655	CB	VAL	B	85	77.447	43.850	116.880	1.00	0.00
	ATOM	656	CG1	VAL	B	85	78.157	44.959	116.092	1.00	0.00
20	ATOM	657	CG2	VAL	B	85	75.962	44.209	116.972	1.00	0.00
	ATOM	658	N	GLN	B	86	79.868	42.270	115.216	1.00	0.00
	ATOM	659	CA	GLN	B	86	81.297	42.010	115.141	1.00	0.00
	ATOM	660	C	GLN	B	86	82.019	43.331	114.920	1.00	0.00
	ATOM	661	O	GLN	B	86	81.734	44.011	113.939	1.00	0.00
25	ATOM	662	CB	GLN	B	86	81.576	41.065	113.968	1.00	0.00

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	ATOM	663	CG	GLN	B	86	82.077	39.706	114.444	1.00	0.00
	ATOM	664	CD	GLN	B	86	82.220	38.755	113.263	1.00	0.00
	ATOM	665	OE1	GLN	B	86	82.664	39.144	112.185	1.00	0.00
	ATOM	666	NE2	GLN	B	86	81.823	37.497	113.454	1.00	0.00
5	ATOM	667	N	ALA	B	87	82.952	43.679	115.811	1.00	0.00
	ATOM	668	CA	ALA	B	87	83.812	44.844	115.659	1.00	0.00
	ATOM	669	C	ALA	B	87	85.206	44.363	115.274	1.00	0.00
	ATOM	670	O	ALA	B	87	85.660	43.351	115.807	1.00	0.00
	ATOM	671	CB	ALA	B	87	83.846	45.637	116.962	1.00	0.00
10	ATOM	672	N	GLU	B	88	85.871	45.058	114.343	1.00	0.00
	ATOM	673	CA	GLU	B	88	87.130	44.600	113.776	1.00	0.00
	ATOM	674	C	GLU	B	88	87.948	45.791	113.271	1.00	0.00
	ATOM	675	O	GLU	B	88	87.512	46.503	112.369	1.00	0.00
	ATOM	676	CB	GLU	B	88	86.807	43.592	112.665	1.00	0.00
15	ATOM	677	CG	GLU	B	88	88.032	42.918	112.033	1.00	0.00
	ATOM	678	CD	GLU	B	88	87.630	41.804	111.065	1.00	0.00
	ATOM	679	OE1	GLU	B	88	88.556	41.161	110.526	1.00	0.00
	ATOM	680	OE2	GLU	B	88	86.410	41.606	110.874	1.00	0.00
	ATOM	681	N	ASN	B	89	89.145	45.997	113.832	1.00	0.00
20	ATOM	682	CA	ASN	B	89	90.166	46.853	113.234	1.00	0.00
	ATOM	683	C	ASN	B	89	91.455	46.046	113.117	1.00	0.00
	ATOM	684	O	ASN	B	89	91.530	44.952	113.668	1.00	0.00
	ATOM	685	CB	ASN	B	89	90.331	48.190	113.983	1.00	0.00
	ATOM	686	CG	ASN	B	89	90.697	48.146	115.465	1.00	0.00
25	ATOM	687	OD1	ASN	B	89	90.335	49.055	116.208	1.00	0.00

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	ATOM	688	ND2	ASN	B	89	91.434	47.136	115.919	1.00	0.00
	ATOM	689	N	ALA	B	90	92.478	46.575	112.438	1.00	0.00
	ATOM	690	CA	ALA	B	90	93.742	45.877	112.195	1.00	0.00
	ATOM	691	C	ALA	B	90	94.312	45.176	113.437	1.00	0.00
5	ATOM	692	O	ALA	B	90	94.969	44.144	113.320	1.00	0.00
	ATOM	693	CB	ALA	B	90	94.760	46.873	111.634	1.00	0.00
	ATOM	694	N	LEU	B	91	94.067	45.746	114.622	1.00	0.00
	ATOM	695	CA	LEU	B	91	94.628	45.317	115.894	1.00	0.00
	ATOM	696	C	LEU	B	91	93.787	44.252	116.613	1.00	0.00
10	ATOM	697	O	LEU	B	91	94.189	43.802	117.683	1.00	0.00
	ATOM	698	CB	LEU	B	91	94.805	46.569	116.772	1.00	0.00
	ATOM	699	CG	LEU	B	91	96.211	46.711	117.373	1.00	0.00
	ATOM	700	CD1	LEU	B	91	96.401	48.149	117.866	1.00	0.00
	ATOM	701	CD2	LEU	B	91	96.441	45.738	118.532	1.00	0.00
15	ATOM	702	N	GLY	B	92	92.628	43.838	116.084	1.00	0.00
	ATOM	703	CA	GLY	B	92	91.849	42.797	116.740	1.00	0.00
	ATOM	704	C	GLY	B	92	90.383	42.775	116.329	1.00	0.00
	ATOM	705	O	GLY	B	92	89.921	43.628	115.571	1.00	0.00
	ATOM	706	N	THR	B	93	89.671	41.784	116.877	1.00	0.00
20	ATOM	707	CA	THR	B	93	88.266	41.517	116.627	1.00	0.00
	ATOM	708	C	THR	B	93	87.579	41.221	117.962	1.00	0.00
	ATOM	709	O	THR	B	93	88.172	40.579	118.828	1.00	0.00
	ATOM	710	CB	THR	B	93	88.136	40.332	115.654	1.00	0.00
	ATOM	711	OG1	THR	B	93	88.965	40.550	114.530	1.00	0.00
25	ATOM	712	CG2	THR	B	93	86.694	40.133	115.174	1.00	0.00

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	ATOM	713	N	SER	B	94	86.334	41.677	118.121	1.00	0.00
	ATOM	714	CA	SER	B	94	85.470	41.378	119.255	1.00	0.00
	ATOM	715	C	SER	B	94	84.058	41.140	118.720	1.00	0.00
	ATOM	716	O	SER	B	94	83.779	41.447	117.560	1.00	0.00
5	ATOM	717	CB	SER	B	94	85.502	42.553	120.236	1.00	0.00
	ATOM	718	OG	SER	B	94	85.040	43.714	119.584	1.00	0.00
	ATOM	719	N	MET	B	95	83.158	40.609	119.553	1.00	0.00
	ATOM	720	CA	MET	B	95	81.765	40.462	119.170	1.00	0.00
	ATOM	721	C	MET	B	95	80.844	40.552	120.378	1.00	0.00
10	ATOM	722	O	MET	B	95	81.277	40.325	121.507	1.00	0.00
	ATOM	723	CB	MET	B	95	81.538	39.164	118.382	1.00	0.00
	ATOM	724	CG	MET	B	95	81.978	37.905	119.140	1.00	0.00
	ATOM	725	SD	MET	B	95	81.442	36.344	118.389	1.00	0.00
	ATOM	726	CE	MET	B	95	79.694	36.340	118.866	1.00	0.00
15	ATOM	727	N	SER	B	96	79.575	40.894	120.131	1.00	0.00
	ATOM	728	CA	SER	B	96	78.571	40.987	121.177	1.00	0.00
	ATOM	729	C	SER	B	96	77.985	39.600	121.463	1.00	0.00
	ATOM	730	O	SER	B	96	78.102	38.700	120.629	1.00	0.00
	ATOM	731	CB	SER	B	96	77.477	41.974	120.764	1.00	0.00
20	ATOM	732	OG	SER	B	96	76.714	41.464	119.696	1.00	0.00
	ATOM	733	N	PRO	B	97	77.332	39.412	122.621	1.00	0.00
	ATOM	734	CA	PRO	B	97	76.564	38.208	122.902	1.00	0.00
	ATOM	735	C	PRO	B	97	75.426	38.043	121.887	1.00	0.00
	ATOM	736	O	PRO	B	97	74.889	39.035	121.395	1.00	0.00
25	ATOM	737	CB	PRO	B	97	76.011	38.383	124.322	1.00	0.00

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	ATOM	738	CG	PRO	B	97	76.850	39.505	124.933	1.00	0.00
	ATOM	739	CD	PRO	B	97	77.248	40.349	123.729	1.00	0.00
	ATOM	740	N	GLN	B	98	75.055	36.793	121.578	1.00	0.00
	ATOM	741	CA	GLN	B	98	74.031	36.484	120.587	1.00	0.00
5	ATOM	742	C	GLN	B	98	72.627	36.738	121.142	1.00	0.00
	ATOM	743	O	GLN	B	98	72.168	36.026	122.033	1.00	0.00
	ATOM	744	CB	GLN	B	98	74.179	35.036	120.097	1.00	0.00
	ATOM	745	CG	GLN	B	98	75.483	34.836	119.314	1.00	0.00
	ATOM	746	CD	GLN	B	98	75.572	33.446	118.687	1.00	0.00
10	ATOM	747	OE1	GLN	B	98	75.107	32.467	119.263	1.00	0.00
	ATOM	748	NE2	GLN	B	98	76.171	33.348	117.499	1.00	0.00
	ATOM	749	N	LEU	B	99	71.942	37.745	120.589	1.00	0.00
	ATOM	750	CA	LEU	B	99	70.564	38.092	120.895	1.00	0.00
	ATOM	751	C	LEU	B	99	69.628	37.206	120.073	1.00	0.00
15	ATOM	752	O	LEU	B	99	69.841	37.031	118.876	1.00	0.00
	ATOM	753	CB	LEU	B	99	70.370	39.583	120.587	1.00	0.00
	ATOM	754	CG	LEU	B	99	69.004	40.170	120.974	1.00	0.00
	ATOM	755	CD1	LEU	B	99	68.560	39.777	122.388	1.00	0.00
	ATOM	756	CD2	LEU	B	99	69.116	41.697	120.908	1.00	0.00
20	ATOM	757	N	CYS	B	100	68.610	36.630	120.720	1.00	0.00
	ATOM	758	CA	CYS	B	100	67.677	35.695	120.109	1.00	0.00
	ATOM	759	C	CYS	B	100	66.276	36.295	120.092	1.00	0.00
	ATOM	760	O	CYS	B	100	65.664	36.429	121.150	1.00	0.00
	ATOM	761	CB	CYS	B	100	67.675	34.391	120.911	1.00	0.00
25	ATOM	762	SG	CYS	B	100	66.715	33.084	120.114	1.00	0.00

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5	ATOM	763	N	LEU B 101	65.756	36.654	118.914	1.00	0.00
	ATOM	764	CA	LEU B 101	64.415	37.218	118.812	1.00	0.00
	ATOM	765	C	LEU B 101	63.710	36.751	117.550	1.00	0.00
	ATOM	766	O	LEU B 101	64.346	36.294	116.606	1.00	0.00
	ATOM	767	CB	LEU B 101	64.447	38.752	118.930	1.00	0.00
	ATOM	768	CG	LEU B 101	65.404	39.485	117.970	1.00	0.00
	ATOM	769	CD1	LEU B 101	64.930	39.492	116.511	1.00	0.00
	ATOM	770	CD2	LEU B 101	65.525	40.942	118.421	1.00	0.00
	ATOM	771	N	ASP B 102	62.384	36.886	117.552	1.00	0.00
10	ATOM	772	CA	ASP B 102	61.561	36.861	116.359	1.00	0.00
	ATOM	773	C	ASP B 102	61.389	38.327	115.968	1.00	0.00
	ATOM	774	O	ASP B 102	61.034	39.128	116.831	1.00	0.00
	ATOM	775	CB	ASP B 102	60.229	36.193	116.717	1.00	0.00
	ATOM	776	CG	ASP B 102	59.141	36.243	115.646	1.00	0.00
15	ATOM	777	OD1	ASP B 102	59.282	36.982	114.645	1.00	0.00
	ATOM	778	OD2	ASP B 102	58.146	35.525	115.870	1.00	0.00
	ATOM	779	N	PRO B 103	61.653	38.717	114.711	1.00	0.00
20	ATOM	780	CA	PRO B 103	61.415	40.071	114.236	1.00	0.00
	ATOM	781	C	PRO B 103	60.072	40.639	114.703	1.00	0.00
	ATOM	782	O	PRO B 103	59.996	41.791	115.126	1.00	0.00
	ATOM	783	CB	PRO B 103	61.470	39.976	112.713	1.00	0.00
	ATOM	784	CG	PRO B 103	62.432	38.819	112.468	1.00	0.00
	ATOM	785	CD	PRO B 103	62.168	37.878	113.641	1.00	0.00
	ATOM	786	N	MET B 104	59.012	39.825	114.658	1.00	0.00
25	ATOM	787	CA	MET B 104	57.669	40.271	114.991	1.00	0.00

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5	ATOM	788	C	MET	B	104	57.432	40.442	116.493	1.00	0.00
	ATOM	789	O	MET	B	104	56.380	40.952	116.876	1.00	0.00
	ATOM	790	CB	MET	B	104	56.641	39.337	114.343	1.00	0.00
	ATOM	791	CG	MET	B	104	56.706	39.441	112.815	1.00	0.00
	ATOM	792	SD	MET	B	104	56.494	41.096	112.089	1.00	0.00
10	ATOM	793	CE	MET	B	104	54.889	41.570	112.779	1.00	0.00
	ATOM	794	N	ASP	B	105	58.396	40.073	117.342	1.00	0.00
	ATOM	795	CA	ASP	B	105	58.316	40.280	118.783	1.00	0.00
	ATOM	796	C	ASP	B	105	58.840	41.649	119.211	1.00	0.00
	ATOM	797	O	ASP	B	105	58.629	42.030	120.361	1.00	0.00
15	ATOM	798	CB	ASP	B	105	59.046	39.149	119.520	1.00	0.00
	ATOM	799	CG	ASP	B	105	58.248	37.847	119.550	1.00	0.00
	ATOM	800	OD1	ASP	B	105	57.072	37.865	119.119	1.00	0.00
	ATOM	801	OD2	ASP	B	105	58.826	36.857	120.046	1.00	0.00
	ATOM	802	N	VAL	B	106	59.502	42.399	118.318	1.00	0.00
20	ATOM	803	CA	VAL	B	106	60.060	43.706	118.654	1.00	0.00
	ATOM	804	C	VAL	B	106	59.485	44.814	117.771	1.00	0.00
	ATOM	805	O	VAL	B	106	60.163	45.796	117.481	1.00	0.00
	ATOM	806	CB	VAL	B	106	61.598	43.652	118.635	1.00	0.00
	ATOM	807	CG1	VAL	B	106	62.115	42.672	119.695	1.00	0.00
25	ATOM	808	CG2	VAL	B	106	62.168	43.265	117.265	1.00	0.00
	ATOM	809	N	VAL	B	107	58.218	44.687	117.370	1.00	0.00
	ATOM	810	CA	VAL	B	107	57.546	45.697	116.566	1.00	0.00
	ATOM	811	C	VAL	B	107	57.434	47.004	117.346	1.00	0.00
	ATOM	812	O	VAL	B	107	56.994	47.006	118.495	1.00	0.00

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		ATOM	813	CB	VAL	B	107	56.178	45.180	116.105	1.00	0.00
		ATOM	814	CG1	VAL	B	107	55.412	46.262	115.338	1.00	0.00
		ATOM	815	CG2	VAL	B	107	56.359	43.971	115.182	1.00	0.00
		ATOM	816	N	LYS	B	108	57.824	48.114	116.709	1.00	0.00
5		ATOM	817	CA	LYS	B	108	57.649	49.448	117.255	1.00	0.00
		ATOM	818	C	LYS	B	108	56.264	49.960	116.852	1.00	0.00
		ATOM	819	O	LYS	B	108	56.028	50.236	115.676	1.00	0.00
		ATOM	820	CB	LYS	B	108	58.754	50.362	116.719	1.00	0.00
		ATOM	821	CG	LYS	B	108	58.762	51.724	117.429	1.00	0.00
10		ATOM	822	CD	LYS	B	108	58.893	52.845	116.396	1.00	0.00
		ATOM	823	CE	LYS	B	108	59.285	54.165	117.059	1.00	0.00
		ATOM	824	NZ	LYS	B	108	59.219	55.273	116.089	1.00	0.00
		ATOM	825	N	LEU	B	109	55.355	50.086	117.826	1.00	0.00
		ATOM	826	CA	LEU	B	109	54.017	50.621	117.613	1.00	0.00
15		ATOM	827	C	LEU	B	109	54.000	52.136	117.803	1.00	0.00
		ATOM	828	O	LEU	B	109	54.558	52.647	118.773	1.00	0.00
		ATOM	829	CB	LEU	B	109	53.023	50.019	118.615	1.00	0.00
		ATOM	830	CG	LEU	B	109	52.549	48.587	118.337	1.00	0.00
		ATOM	831	CD1	LEU	B	109	51.535	48.225	119.431	1.00	0.00
20		ATOM	832	CD2	LEU	B	109	51.866	48.456	116.969	1.00	0.00
		ATOM	833	N	GLU	B	110	53.277	52.830	116.918	1.00	0.00
		ATOM	834	CA	GLU	B	110	52.833	54.197	117.146	1.00	0.00
		ATOM	835	C	GLU	B	110	51.465	54.142	117.854	1.00	0.00
		ATOM	836	O	GLU	B	110	50.815	53.094	117.838	1.00	0.00
25		ATOM	837	CB	GLU	B	110	52.734	54.939	115.808	1.00	0.00

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	ATOM	838	CG	GLU	B	110	54.047	54.966	115.004	1.00	0.00
	ATOM	839	CD	GLU	B	110	55.104	55.892	115.604	1.00	0.00
	ATOM	840	OE1	GLU	B	110	54.686	56.919	116.181	1.00	0.00
	ATOM	841	OE2	GLU	B	110	56.310	55.573	115.460	1.00	0.00
5	ATOM	842	N	PRO	B	111	51.012	55.234	118.493	1.00	0.00
	ATOM	843	CA	PRO	B	111	49.763	55.250	119.247	1.00	0.00
	ATOM	844	C	PRO	B	111	48.533	55.081	118.347	1.00	0.00
	ATOM	845	O	PRO	B	111	48.597	55.374	117.153	1.00	0.00
	ATOM	846	CB	PRO	B	111	49.718	56.605	119.963	1.00	0.00
10	ATOM	847	CG	PRO	B	111	51.148	57.136	119.891	1.00	0.00
	ATOM	848	CD	PRO	B	111	51.702	56.506	118.620	1.00	0.00
	ATOM	849	N	PRO	B	112	47.394	54.646	118.905	1.00	0.00
	ATOM	850	CA	PRO	B	112	46.144	54.532	118.169	1.00	0.00
	ATOM	851	C	PRO	B	112	45.566	55.924	117.886	1.00	0.00
15	ATOM	852	O	PRO	B	112	45.922	56.908	118.536	1.00	0.00
	ATOM	853	CB	PRO	B	112	45.221	53.719	119.080	1.00	0.00
	ATOM	854	CG	PRO	B	112	45.672	54.212	120.447	1.00	0.00
	ATOM	855	CD	PRO	B	112	47.188	54.312	120.304	1.00	0.00
	ATOM	856	N	MET	B	113	44.658	55.997	116.911	1.00	0.00
20	ATOM	857	CA	MET	B	113	44.010	57.227	116.489	1.00	0.00
	ATOM	858	C	MET	B	113	42.783	57.447	117.366	1.00	0.00
	ATOM	859	O	MET	B	113	41.724	56.907	117.064	1.00	0.00
	ATOM	860	CB	MET	B	113	43.583	57.106	115.019	1.00	0.00
	ATOM	861	CG	MET	B	113	44.732	56.765	114.070	1.00	0.00
25	ATOM	862	SD	MET	B	113	44.139	56.336	112.417	1.00	0.00

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	ATOM	863	CE	MET B 113	45.685	55.746	111.696	1.00	0.00
	ATOM	864	N	LEU B 114	42.915	58.230	118.440	1.00	0.00
	ATOM	865	CA	LEU B 114	41.810	58.562	119.330	1.00	0.00
	ATOM	866	C	LEU B 114	41.196	59.883	118.886	1.00	0.00
5	ATOM	867	O	LEU B 114	41.850	60.922	118.963	1.00	0.00
	ATOM	868	CB	LEU B 114	42.323	58.647	120.770	1.00	0.00
	ATOM	869	CG	LEU B 114	41.229	58.899	121.825	1.00	0.00
	ATOM	870	CD1	LEU B 114	40.307	57.689	122.006	1.00	0.00
	ATOM	871	CD2	LEU B 114	41.852	59.249	123.183	1.00	0.00
10	ATOM	872	N	ARG B 115	39.941	59.840	118.438	1.00	0.00
	ATOM	873	CA	ARG B 115	39.165	61.020	118.102	1.00	0.00
	ATOM	874	C	ARG B 115	37.953	61.083	119.024	1.00	0.00
	ATOM	875	O	ARG B 115	37.411	60.052	119.421	1.00	0.00
	ATOM	876	CB	ARG B 115	38.776	60.993	116.616	1.00	0.00
15	ATOM	877	CG	ARG B 115	37.823	59.844	116.260	1.00	0.00
	ATOM	878	CD	ARG B 115	37.526	59.812	114.758	1.00	0.00
	ATOM	879	NE	ARG B 115	38.706	59.429	113.965	1.00	0.00
	ATOM	880	CZ	ARG B 115	39.041	58.170	113.634	1.00	0.00
	ATOM	881	NH1	ARG B 115	38.394	57.117	114.147	1.00	0.00
20	ATOM	882	NH2	ARG B 115	40.027	57.943	112.762	1.00	0.00
	ATOM	883	N	THR B 116	37.516	62.297	119.357	1.00	0.00
	ATOM	884	CA	THR B 116	36.217	62.484	119.977	1.00	0.00
	ATOM	885	C	THR B 116	35.140	62.282	118.915	1.00	0.00
	ATOM	886	O	THR B 116	35.393	62.473	117.724	1.00	0.00
25	ATOM	887	CB	THR B 116	36.134	63.868	120.632	1.00	0.00

	ATOM	888	OG1	THR	B	116	34.948	63.964	121.394	1.00	0.00
	ATOM	889	CG2	THR	B	116	36.206	65.032	119.634	1.00	0.00
	ATOM	890	N	MET	B	117	33.934	61.914	119.346	1.00	0.00
	ATOM	891	CA	MET	B	117	32.766	62.001	118.492	1.00	0.00
5	ATOM	892	C	MET	B	117	32.367	63.472	118.342	1.00	0.00
	ATOM	893	O	MET	B	117	32.796	64.329	119.113	1.00	0.00
	ATOM	894	CB	MET	B	117	31.617	61.186	119.099	1.00	0.00
	ATOM	895	CG	MET	B	117	31.891	59.677	119.118	1.00	0.00
	ATOM	896	SD	MET	B	117	32.094	58.860	117.512	1.00	0.00
10	ATOM	897	CE	MET	B	117	30.475	59.172	116.765	1.00	0.00
	ATOM	898	N	ASP	B	118	31.516	63.734	117.350	1.00	0.00
	ATOM	899	CA	ASP	B	118	30.738	64.947	117.156	1.00	0.00
	ATOM	900	C	ASP	B	118	29.300	64.516	117.470	1.00	0.00
	ATOM	901	O	ASP	B	118	28.594	64.078	116.561	1.00	0.00
15	ATOM	902	CB	ASP	B	118	30.944	65.386	115.697	1.00	0.00
	ATOM	903	CG	ASP	B	118	30.202	66.654	115.285	1.00	0.00
	ATOM	904	OD1	ASP	B	118	30.378	67.027	114.105	1.00	0.00
	ATOM	905	OD2	ASP	B	118	29.497	67.236	116.137	1.00	0.00
	ATOM	906	N	PRO	B	119	28.908	64.472	118.761	1.00	0.00
20	ATOM	907	CA	PRO	B	119	27.833	63.614	119.218	1.00	0.00
	ATOM	908	C	PRO	B	119	26.606	64.458	119.564	1.00	0.00
	ATOM	909	O	PRO	B	119	25.801	64.751	118.683	1.00	0.00
	ATOM	910	CB	PRO	B	119	28.434	62.878	120.424	1.00	0.00
	ATOM	911	CG	PRO	B	119	29.461	63.861	121.007	1.00	0.00
25	ATOM	912	CD	PRO	B	119	29.616	64.953	119.940	1.00	0.00

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	ATOM	913	N	SER B 120	26.463	64.822	120.848	1.00	0.00
	ATOM	914	CA	SER B 120	25.256	65.356	121.463	1.00	0.00
	ATOM	915	C	SER B 120	24.167	64.275	121.506	1.00	0.00
	ATOM	916	O	SER B 120	24.021	63.527	120.540	1.00	0.00
5	ATOM	917	CB	SER B 120	24.772	66.628	120.753	1.00	0.00
	ATOM	918	OG	SER B 120	23.807	67.281	121.552	1.00	0.00
	ATOM	919	N	PRO B 121	23.388	64.156	122.596	1.00	0.00
	ATOM	920	CA	PRO B 121	22.155	63.374	122.597	1.00	0.00
	ATOM	921	C	PRO B 121	21.096	63.970	121.649	1.00	0.00
10	ATOM	922	O	PRO B 121	20.056	64.439	122.103	1.00	0.00
	ATOM	923	CB	PRO B 121	21.683	63.364	124.063	1.00	0.00
	ATOM	924	CG	PRO B 121	22.956	63.638	124.857	1.00	0.00
	ATOM	925	CD	PRO B 121	23.717	64.596	123.942	1.00	0.00
	ATOM	926	N	GLU B 122	21.351	63.961	120.335	1.00	0.00
15	ATOM	927	CA	GLU B 122	20.571	64.685	119.338	1.00	0.00
	ATOM	928	C	GLU B 122	20.501	66.175	119.696	1.00	0.00
	ATOM	929	O	GLU B 122	21.532	66.683	120.196	1.00	0.00
	ATOM	930	CB	GLU B 122	19.185	64.044	119.146	1.00	0.00
	ATOM	931	CG	GLU B 122	19.288	62.556	118.784	1.00	0.00
20	ATOM	932	CD	GLU B 122	17.910	61.948	118.549	1.00	0.00
	ATOM	933	OE1	GLU B 122	17.364	62.181	117.449	1.00	0.00
	ATOM	934	OE2	GLU B 122	17.425	61.260	119.475	1.00	0.00
	ATOM	935	N	PRO B 126	19.495	66.706	127.889	1.00	0.00
	ATOM	936	CA	PRO B 126	20.675	65.839	127.719	1.00	0.00
25	ATOM	937	C	PRO B 126	21.227	65.468	129.093	1.00	0.00

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	ATOM	938	O	PRO B 126	20.867	66.111	130.078	1.00	0.00
	ATOM	939	CB	PRO B 126	21.700	66.621	126.882	1.00	0.00
	ATOM	940	CG	PRO B 126	21.237	68.075	126.990	1.00	0.00
	ATOM	941	CD	PRO B 126	19.723	67.898	127.059	1.00	0.00
5	ATOM	942	N	GLN B 127	22.079	64.439	129.155	1.00	0.00
	ATOM	943	CA	GLN B 127	22.722	63.976	130.376	1.00	0.00
	ATOM	944	C	GLN B 127	24.089	64.652	130.497	1.00	0.00
	ATOM	945	O	GLN B 127	24.881	64.608	129.558	1.00	0.00
	ATOM	946	CB	GLN B 127	22.835	62.446	130.324	1.00	0.00
10	ATOM	947	CG	GLN B 127	23.638	61.887	131.506	1.00	0.00
	ATOM	948	CD	GLN B 127	23.651	60.360	131.537	1.00	0.00
	ATOM	949	OE1	GLN B 127	22.750	59.710	131.014	1.00	0.00
	ATOM	950	NE2	GLN B 127	24.675	59.779	132.162	1.00	0.00
	ATOM	951	N	ALA B 128	24.357	65.284	131.644	1.00	0.00
15	ATOM	952	CA	ALA B 128	25.593	66.013	131.890	1.00	0.00
	ATOM	953	C	ALA B 128	26.771	65.069	132.151	1.00	0.00
	ATOM	954	O	ALA B 128	26.586	63.908	132.516	1.00	0.00
	ATOM	955	CB	ALA B 128	25.390	66.968	133.070	1.00	0.00
	ATOM	956	N	GLY B 129	27.989	65.594	131.987	1.00	0.00
20	ATOM	957	CA	GLY B 129	29.219	64.944	132.407	1.00	0.00
	ATOM	958	C	GLY B 129	29.637	63.792	131.499	1.00	0.00
	ATOM	959	O	GLY B 129	30.295	62.876	131.981	1.00	0.00
	ATOM	960	N	CYS B 130	29.264	63.830	130.212	1.00	0.00
	ATOM	961	CA	CYS B 130	29.501	62.753	129.256	1.00	0.00
25	ATOM	962	C	CYS B 130	30.410	63.203	128.114	1.00	0.00

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	ATOM	963	O	CYS B 130	30.363	64.361	127.701	1.00	0.00
	ATOM	964	CB	CYS B 130	28.170	62.235	128.705	1.00	0.00
	ATOM	965	SG	CYS B 130	27.085	61.372	129.875	1.00	0.00
	ATOM	966	N	LEU B 131	31.208	62.257	127.607	1.00	0.00
5	ATOM	967	CA	LEU B 131	31.985	62.322	126.376	1.00	0.00
	ATOM	968	C	LEU B 131	31.702	61.029	125.612	1.00	0.00
	ATOM	969	O	LEU B 131	31.471	59.995	126.240	1.00	0.00
	ATOM	970	CB	LEU B 131	33.489	62.336	126.690	1.00	0.00
	ATOM	971	CG	LEU B 131	34.003	63.554	127.466	1.00	0.00
10	ATOM	972	CD1	LEU B 131	35.432	63.259	127.935	1.00	0.00
	ATOM	973	CD2	LEU B 131	34.011	64.804	126.584	1.00	0.00
	ATOM	974	N	GLN B 132	31.774	61.060	124.277	1.00	0.00
	ATOM	975	CA	GLN B 132	31.825	59.848	123.470	1.00	0.00
	ATOM	976	C	GLN B 132	33.101	59.878	122.629	1.00	0.00
15	ATOM	977	O	GLN B 132	33.392	60.881	121.980	1.00	0.00
	ATOM	978	CB	GLN B 132	30.555	59.677	122.627	1.00	0.00
	ATOM	979	CG	GLN B 132	29.312	59.443	123.503	1.00	0.00
	ATOM	980	CD	GLN B 132	28.134	58.883	122.706	1.00	0.00
	ATOM	981	OE1	GLN B 132	28.078	59.035	121.488	1.00	0.00
20	ATOM	982	NE2	GLN B 132	27.193	58.213	123.376	1.00	0.00
	ATOM	983	N	LEU B 133	33.874	58.787	122.682	1.00	0.00
	ATOM	984	CA	LEU B 133	35.167	58.629	122.029	1.00	0.00
	ATOM	985	C	LEU B 133	35.051	57.591	120.923	1.00	0.00
	ATOM	986	O	LEU B 133	34.181	56.726	120.976	1.00	0.00
25	ATOM	987	CB	LEU B 133	36.206	58.114	123.035	1.00	0.00

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	ATOM	988	CG	LEU B 133	36.320	58.933	124.324	1.00	0.00
	ATOM	989	CD1	LEU B 133	37.303	58.234	125.271	1.00	0.00
	ATOM	990	CD2	LEU B 133	36.780	60.365	124.033	1.00	0.00
	ATOM	991	N	CYS B 134	35.965	57.644	119.955	1.00	0.00
5	ATOM	992	CA	CYS B 134	36.120	56.632	118.925	1.00	0.00
	ATOM	993	C	CYS B 134	37.613	56.445	118.693	1.00	0.00
	ATOM	994	O	CYS B 134	38.353	57.428	118.696	1.00	0.00
	ATOM	995	CB	CYS B 134	35.391	57.094	117.660	1.00	0.00
	ATOM	996	SG	CYS B 134	35.777	56.024	116.251	1.00	0.00
10	ATOM	997	N	TRP B 135	38.070	55.200	118.513	1.00	0.00
	ATOM	998	CA	TRP B 135	39.459	54.944	118.180	1.00	0.00
	ATOM	999	C	TRP B 135	39.624	53.767	117.231	1.00	0.00
	ATOM	1000	O	TRP B 135	38.793	52.862	117.190	1.00	0.00
	ATOM	1001	CB	TRP B 135	40.328	54.785	119.433	1.00	0.00
15	ATOM	1002	CG	TRP B 135	39.989	53.640	120.335	1.00	0.00
	ATOM	1003	CD1	TRP B 135	40.491	52.390	120.243	1.00	0.00
	ATOM	1004	CD2	TRP B 135	39.112	53.630	121.496	1.00	0.00
	ATOM	1005	NE1	TRP B 135	39.966	51.592	121.239	1.00	0.00
	ATOM	1006	CE2	TRP B 135	39.116	52.316	122.050	1.00	0.00
20	ATOM	1007	CE3	TRP B 135	38.321	54.602	122.146	1.00	0.00
	ATOM	1008	CZ2	TRP B 135	38.367	51.983	123.187	1.00	0.00
	ATOM	1009	CZ3	TRP B 135	37.598	54.286	123.310	1.00	0.00
	ATOM	1010	CH2	TRP B 135	37.614	52.979	123.827	1.00	0.00
	ATOM	1011	N	GLU B 136	40.725	53.813	116.481	1.00	0.00
25	ATOM	1012	CA	GLU B 136	41.204	52.780	115.583	1.00	0.00

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		ATOM 1013	C	GLU B 136	42.692	52.617	115.887	1.00	0.00
		ATOM 1014	O	GLU B 136	43.326	53.588	116.304	1.00	0.00
		ATOM 1015	CB	GLU B 136	41.015	53.251	114.135	1.00	0.00
		ATOM 1016	CG	GLU B 136	39.537	53.383	113.753	1.00	0.00
5		ATOM 1017	CD	GLU B 136	39.398	54.083	112.410	1.00	0.00
		ATOM 1018	OE1	GLU B 136	39.484	55.331	112.423	1.00	0.00
		ATOM 1019	OE2	GLU B 136	39.217	53.373	111.400	1.00	0.00
		ATOM 1020	N	PRO B 137	43.283	51.432	115.687	1.00	0.00
		ATOM 1021	CA	PRO B 137	44.704	51.252	115.885	1.00	0.00
10		ATOM 1022	C	PRO B 137	45.478	51.961	114.776	1.00	0.00
		ATOM 1023	O	PRO B 137	44.928	52.378	113.755	1.00	0.00
		ATOM 1024	CB	PRO B 137	44.932	49.741	115.851	1.00	0.00
		ATOM 1025	CG	PRO B 137	43.852	49.280	114.875	1.00	0.00
		ATOM 1026	CD	PRO B 137	42.678	50.210	115.189	1.00	0.00
15		ATOM 1027	N	TRP B 138	46.783	52.077	114.995	1.00	0.00
		ATOM 1028	CA	TRP B 138	47.711	52.609	114.026	1.00	0.00
		ATOM 1029	C	TRP B 138	47.721	51.706	112.787	1.00	0.00
		ATOM 1030	O	TRP B 138	48.022	50.518	112.890	1.00	0.00
		ATOM 1031	CB	TRP B 138	49.067	52.690	114.715	1.00	0.00
20		ATOM 1032	CG	TRP B 138	50.200	53.088	113.842	1.00	0.00
		ATOM 1033	CD1	TRP B 138	50.282	54.227	113.120	1.00	0.00
		ATOM 1034	CD2	TRP B 138	51.440	52.368	113.613	1.00	0.00
		ATOM 1035	NE1	TRP B 138	51.490	54.267	112.457	1.00	0.00
		ATOM 1036	CE2	TRP B 138	52.249	53.148	112.741	1.00	0.00
25		ATOM 1037	CE3	TRP B 138	51.974	51.146	114.072	1.00	0.00

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		ATOM 1038	CZ2	TRP	B	138	53.529	52.742	112.350	1.00	0.00
		ATOM 1039	CZ3	TRP	B	138	53.266	50.737	113.697	1.00	0.00
		ATOM 1040	CH2	TRP	B	138	54.043	51.531	112.837	1.00	0.00
		ATOM 1041	N	GLN	B	139	47.356	52.267	111.627	1.00	0.00
5		ATOM 1042	CA	GLN	B	139	46.991	51.517	110.430	1.00	0.00
		ATOM 1043	C	GLN	B	139	48.037	50.487	109.971	1.00	0.00
		ATOM 1044	O	GLN	B	139	47.652	49.358	109.672	1.00	0.00
		ATOM 1045	CB	GLN	B	139	46.536	52.473	109.317	1.00	0.00
		ATOM 1046	CG	GLN	B	139	45.905	51.719	108.138	1.00	0.00
10		ATOM 1047	CD	GLN	B	139	45.354	52.670	107.078	1.00	0.00
		ATOM 1048	OE1	GLN	B	139	45.741	53.833	107.009	1.00	0.00
		ATOM 1049	NE2	GLN	B	139	44.444	52.178	106.237	1.00	0.00
		ATOM 1050	N	PRO	B	140	49.345	50.803	109.918	1.00	0.00
		ATOM 1051	CA	PRO	B	140	50.381	49.821	109.610	1.00	0.00
15		ATOM 1052	C	PRO	B	140	50.334	48.586	110.519	1.00	0.00
		ATOM 1053	O	PRO	B	140	50.674	47.489	110.081	1.00	0.00
		ATOM 1054	CB	PRO	B	140	51.717	50.556	109.754	1.00	0.00
		ATOM 1055	CG	PRO	B	140	51.340	52.016	109.527	1.00	0.00
		ATOM 1056	CD	PRO	B	140	49.945	52.105	110.139	1.00	0.00
20		ATOM 1057	N	GLY	B	141	49.911	48.760	111.777	1.00	0.00
		ATOM 1058	CA	GLY	B	141	49.756	47.683	112.742	1.00	0.00
		ATOM 1059	C	GLY	B	141	48.312	47.187	112.856	1.00	0.00
		ATOM 1060	O	GLY	B	141	48.012	46.449	113.789	1.00	0.00
		ATOM 1061	N	LEU	B	142	47.418	47.548	111.924	1.00	0.00
25		ATOM 1062	CA	LEU	B	142	46.021	47.113	111.936	1.00	0.00

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		ATOM 1063	C	LEU B 142	45.925	45.586	111.964	1.00	0.00
		ATOM 1064	O	LEU B 142	45.101	45.027	112.685	1.00	0.00
		ATOM 1065	CB	LEU B 142	45.290	47.691	110.714	1.00	0.00
		ATOM 1066	CG	LEU B 142	43.829	47.235	110.553	1.00	0.00
5		ATOM 1067	CD1	LEU B 142	42.954	47.653	111.740	1.00	0.00
		ATOM 1068	CD2	LEU B 142	43.255	47.848	109.270	1.00	0.00
		ATOM 1069	N	HIS B 143	46.781	44.915	111.185	1.00	0.00
		ATOM 1070	CA	HIS B 143	46.831	43.462	111.115	1.00	0.00
		ATOM 1071	C	HIS B 143	47.169	42.820	112.468	1.00	0.00
10		ATOM 1072	O	HIS B 143	46.832	41.660	112.696	1.00	0.00
		ATOM 1073	CB	HIS B 143	47.814	43.026	110.020	1.00	0.00
		ATOM 1074	CG	HIS B 143	49.273	43.222	110.355	1.00	0.00
		ATOM 1075	ND1	HIS B 143	49.962	44.403	110.110	1.00	0.00
		ATOM 1076	CD2	HIS B 143	50.209	42.361	110.879	1.00	0.00
15		ATOM 1077	CE1	HIS B 143	51.243	44.193	110.458	1.00	0.00
		ATOM 1078	NE2	HIS B 143	51.459	42.968	110.940	1.00	0.00
		ATOM 1079	N	ILE B 144	47.843	43.560	113.357	1.00	0.00
		ATOM 1080	CA	ILE B 144	48.223	43.088	114.677	1.00	0.00
		ATOM 1081	C	ILE B 144	47.030	43.294	115.617	1.00	0.00
20		ATOM 1082	O	ILE B 144	46.555	44.416	115.778	1.00	0.00
		ATOM 1083	CB	ILE B 144	49.491	43.832	115.152	1.00	0.00
		ATOM 1084	CG1	ILE B 144	50.607	43.705	114.099	1.00	0.00
		ATOM 1085	CG2	ILE B 144	49.959	43.280	116.502	1.00	0.00
		ATOM 1086	CD1	ILE B 144	51.941	44.328	114.519	1.00	0.00
25		ATOM 1087	N	ASN B 145	46.545	42.220	116.249	1.00	0.00

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		ATOM 1088	CA	ASN B 145	45.544	42.324	117.306	1.00	0.00
		ATOM 1089	C	ASN B 145	46.212	42.959	118.530	1.00	0.00
		ATOM 1090	O	ASN B 145	47.387	42.696	118.789	1.00	0.00
		ATOM 1091	CB	ASN B 145	44.974	40.929	117.608	1.00	0.00
5		ATOM 1092	CG	ASN B 145	43.716	40.950	118.481	1.00	0.00
		ATOM 1093	OD1	ASN B 145	43.481	41.880	119.246	1.00	0.00
		ATOM 1094	ND2	ASN B 145	42.887	39.914	118.368	1.00	0.00
		ATOM 1095	N	GLN B 146	45.489	43.794	119.284	1.00	0.00
		ATOM 1096	CA	GLN B 146	46.061	44.552	120.384	1.00	0.00
10		ATOM 1097	C	GLN B 146	45.017	44.905	121.443	1.00	0.00
		ATOM 1098	O	GLN B 146	43.816	44.859	121.190	1.00	0.00
		ATOM 1099	CB	GLN B 146	46.879	45.745	119.853	1.00	0.00
		ATOM 1100	CG	GLN B 146	46.269	46.565	118.707	1.00	0.00
		ATOM 1101	CD	GLN B 146	47.377	47.256	117.911	1.00	0.00
15		ATOM 1102	OE1	GLN B 146	48.091	48.106	118.436	1.00	0.00
		ATOM 1103	NE2	GLN B 146	47.548	46.881	116.644	1.00	0.00
		ATOM 1104	N	LYS B 147	45.496	45.202	122.654	1.00	0.00
		ATOM 1105	CA	LYS B 147	44.690	45.739	123.741	1.00	0.00
		ATOM 1106	C	LYS B 147	45.227	47.127	124.057	1.00	0.00
20		ATOM 1107	O	LYS B 147	46.399	47.397	123.791	1.00	0.00
		ATOM 1108	CB	LYS B 147	44.721	44.830	124.980	1.00	0.00
		ATOM 1109	CG	LYS B 147	46.140	44.592	125.511	1.00	0.00
		ATOM 1110	CD	LYS B 147	46.109	43.745	126.787	1.00	0.00
		ATOM 1111	CE	LYS B 147	47.528	43.582	127.347	1.00	0.00
25		ATOM 1112	NZ	LYS B 147	47.536	42.828	128.614	1.00	0.00

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	ATOM 1113	N	CYS B 148	44.378	47.994	124.615	1.00	0.00
	ATOM 1114	CA	CYS B 148	44.730	49.378	124.888	1.00	0.00
	ATOM 1115	C	CYS B 148	44.345	49.756	126.309	1.00	0.00
	ATOM 1116	O	CYS B 148	43.480	49.120	126.899	1.00	0.00
5	ATOM 1117	CB	CYS B 148	44.048	50.293	123.865	1.00	0.00
	ATOM 1118	SG	CYS B 148	44.288	49.858	122.120	1.00	0.00
	ATOM 1119	N	GLU B 149	44.992	50.792	126.844	1.00	0.00
	ATOM 1120	CA	GLU B 149	44.615	51.451	128.086	1.00	0.00
	ATOM 1121	C	GLU B 149	44.198	52.867	127.723	1.00	0.00
10	ATOM 1122	O	GLU B 149	44.812	53.450	126.834	1.00	0.00
	ATOM 1123	CB	GLU B 149	45.815	51.538	129.032	1.00	0.00
	ATOM 1124	CG	GLU B 149	46.254	50.172	129.562	1.00	0.00
	ATOM 1125	CD	GLU B 149	47.545	50.262	130.370	1.00	0.00
	ATOM 1126	OE1	GLU B 149	47.872	49.260	131.040	1.00	0.00
15	ATOM 1127	OE2	GLU B 149	48.201	51.324	130.298	1.00	0.00
	ATOM 1128	N	LEU B 150	43.204	53.419	128.425	1.00	0.00
	ATOM 1129	CA	LEU B 150	42.811	54.822	128.347	1.00	0.00
	ATOM 1130	C	LEU B 150	43.116	55.446	129.707	1.00	0.00
	ATOM 1131	O	LEU B 150	42.769	54.849	130.723	1.00	0.00
20	ATOM 1132	CB	LEU B 150	41.309	54.909	128.030	1.00	0.00
	ATOM 1133	CG	LEU B 150	40.713	56.328	128.076	1.00	0.00
	ATOM 1134	CD1	LEU B 150	41.064	57.112	126.810	1.00	0.00
	ATOM 1135	CD2	LEU B 150	39.188	56.245	128.204	1.00	0.00
	ATOM 1136	N	ARG B 151	43.730	56.635	129.739	1.00	0.00
25	ATOM 1137	CA	ARG B 151	43.841	57.453	130.946	1.00	0.00

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		ATOM 1138	C	ARG B 151	43.060	58.745	130.721	1.00	0.00
		ATOM 1139	O	ARG B 151	43.153	59.346	129.650	1.00	0.00
		ATOM 1140	CB	ARG B 151	45.306	57.744	131.323	1.00	0.00
		ATOM 1141	CG	ARG B 151	46.105	58.238	130.116	1.00	0.00
5		ATOM 1142	CD	ARG B 151	47.275	59.183	130.369	1.00	0.00
		ATOM 1143	NE	ARG B 151	48.421	58.591	131.068	1.00	0.00
		ATOM 1144	CZ	ARG B 151	49.679	59.054	130.930	1.00	0.00
		ATOM 1145	NH1	ARG B 151	49.955	60.085	130.118	1.00	0.00
		ATOM 1146	NH2	ARG B 151	50.679	58.485	131.612	1.00	0.00
10		ATOM 1147	N	HIS B 152	42.285	59.161	131.726	1.00	0.00
		ATOM 1148	CA	HIS B 152	41.529	60.401	131.685	1.00	0.00
		ATOM 1149	C	HIS B 152	41.636	61.105	133.035	1.00	0.00
		ATOM 1150	O	HIS B 152	41.698	60.437	134.068	1.00	0.00
		ATOM 1151	CB	HIS B 152	40.076	60.127	131.280	1.00	0.00
15		ATOM 1152	CG	HIS B 152	39.312	59.247	132.235	1.00	0.00
		ATOM 1153	ND1	HIS B 152	39.461	57.868	132.264	1.00	0.00
		ATOM 1154	CD2	HIS B 152	38.371	59.530	133.195	1.00	0.00
		ATOM 1155	CE1	HIS B 152	38.632	57.397	133.210	1.00	0.00
		ATOM 1156	NE2	HIS B 152	37.933	58.362	133.812	1.00	0.00
20		ATOM 1157	N	LYS B 153	41.680	62.444	133.029	1.00	0.00
		ATOM 1158	CA	LYS B 153	41.651	63.234	134.254	1.00	0.00
		ATOM 1159	C	LYS B 153	41.135	64.645	133.971	1.00	0.00
		ATOM 1160	O	LYS B 153	41.321	65.142	132.858	1.00	0.00
		ATOM 1161	CB	LYS B 153	43.033	63.249	134.928	1.00	0.00
25		ATOM 1162	CG	LYS B 153	44.046	64.247	134.352	1.00	0.00

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		ATOM 1163	CD	LYS B 153	45.361	64.067	135.121	1.00	0.00
		ATOM 1164	CE	LYS B 153	46.376	65.171	134.810	1.00	0.00
		ATOM 1165	NZ	LYS B 153	47.561	65.063	135.684	1.00	0.00
		ATOM 1166	N	PRO B 154	40.499	65.299	134.958	1.00	0.00
5		ATOM 1167	CA	PRO B 154	40.009	66.659	134.818	1.00	0.00
		ATOM 1168	C	PRO B 154	41.191	67.624	134.841	1.00	0.00
		ATOM 1169	O	PRO B 154	42.175	67.377	135.539	1.00	0.00
		ATOM 1170	CB	PRO B 154	39.088	66.883	136.020	1.00	0.00
		ATOM 1171	CG	PRO B 154	39.670	65.968	137.095	1.00	0.00
10		ATOM 1172	CD	PRO B 154	40.229	64.792	136.297	1.00	0.00
		ATOM 1173	N	GLN B 155	41.091	68.733	134.100	1.00	0.00
		ATOM 1174	CA	GLN B 155	42.076	69.801	134.178	1.00	0.00
		ATOM 1175	C	GLN B 155	41.945	70.505	135.530	1.00	0.00
		ATOM 1176	O	GLN B 155	41.261	71.520	135.641	1.00	0.00
15		ATOM 1177	CB	GLN B 155	41.898	70.792	133.022	1.00	0.00
		ATOM 1178	CG	GLN B 155	42.297	70.181	131.675	1.00	0.00
		ATOM 1179	CD	GLN B 155	42.327	71.222	130.558	1.00	0.00
		ATOM 1180	OE1	GLN B 155	42.045	72.399	130.774	1.00	0.00
		ATOM 1181	NE2	GLN B 155	42.683	70.774	129.356	1.00	0.00
20		ATOM 1182	N	ARG B 156	42.589	69.951	136.562	1.00	0.00
		ATOM 1183	CA	ARG B 156	42.665	70.514	137.902	1.00	0.00
		ATOM 1184	C	ARG B 156	44.099	70.362	138.408	1.00	0.00
		ATOM 1185	O	ARG B 156	44.824	69.471	137.959	1.00	0.00
		ATOM 1186	CB	ARG B 156	41.679	69.806	138.843	1.00	0.00
25		ATOM 1187	CG	ARG B 156	40.219	69.993	138.409	1.00	0.00

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	ATOM 1188	CD	ARG B 156	39.266	69.220	139.329	1.00	0.00
	ATOM 1189	NE	ARG B 156	39.227	69.801	140.680	1.00	0.00
	ATOM 1190	CZ	ARG B 156	38.397	70.769	141.109	1.00	0.00
	ATOM 1191	NH1	ARG B 156	37.403	71.236	140.341	1.00	0.00
5	ATOM 1192	NH2	ARG B 156	38.570	71.280	142.336	1.00	0.00
	ATOM 1193	N	GLY B 157	44.496	71.241	139.338	1.00	0.00
	ATOM 1194	CA	GLY B 157	45.826	71.275	139.927	1.00	0.00
	ATOM 1195	C	GLY B 157	46.240	69.893	140.427	1.00	0.00
	ATOM 1196	O	GLY B 157	45.601	69.347	141.325	1.00	0.00
10	ATOM 1197	N	GLU B 158	47.287	69.334	139.812	1.00	0.00
	ATOM 1198	CA	GLU B 158	47.836	68.015	140.082	1.00	0.00
	ATOM 1199	C	GLU B 158	46.759	66.934	140.198	1.00	0.00
	ATOM 1200	O	GLU B 158	46.798	66.103	141.104	1.00	0.00
	ATOM 1201	CB	GLU B 158	48.786	68.073	141.289	1.00	0.00
15	ATOM 1202	CG	GLU B 158	49.774	69.249	141.203	1.00	0.00
	ATOM 1203	CD	GLU B 158	50.440	69.351	139.833	1.00	0.00
	ATOM 1204	OE1	GLU B 158	49.904	70.117	139.000	1.00	0.00
	ATOM 1205	OE2	GLU B 158	51.448	68.640	139.634	1.00	0.00
	ATOM 1206	N	ALA B 159	45.817	66.920	139.245	1.00	0.00
20	ATOM 1207	CA	ALA B 159	44.848	65.842	139.114	1.00	0.00
	ATOM 1208	C	ALA B 159	45.571	64.514	138.874	1.00	0.00
	ATOM 1209	O	ALA B 159	46.641	64.492	138.261	1.00	0.00
	ATOM 1210	CB	ALA B 159	43.887	66.151	137.963	1.00	0.00
	ATOM 1211	N	SER B 160	44.969	63.411	139.330	1.00	0.00
25	ATOM 1212	CA	SER B 160	45.483	62.059	139.152	1.00	0.00

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	ATOM 1213	C	SER B 160	44.804	61.396	137.954	1.00	0.00
	ATOM 1214	O	SER B 160	43.633	61.659	137.684	1.00	0.00
	ATOM 1215	CB	SER B 160	45.216	61.246	140.422	1.00	0.00
	ATOM 1216	OG	SER B 160	45.810	61.886	141.533	1.00	0.00
5	ATOM 1217	N	TRP B 161	45.530	60.523	137.248	1.00	0.00
	ATOM 1218	CA	TRP B 161	44.974	59.739	136.157	1.00	0.00
	ATOM 1219	C	TRP B 161	43.989	58.697	136.685	1.00	0.00
	ATOM 1220	O	TRP B 161	44.316	57.957	137.609	1.00	0.00
	ATOM 1221	CB	TRP B 161	46.100	59.056	135.372	1.00	0.00
10	ATOM 1222	CG	TRP B 161	46.949	59.975	134.551	1.00	0.00
	ATOM 1223	CD1	TRP B 161	48.284	60.147	134.665	1.00	0.00
	ATOM 1224	CD2	TRP B 161	46.524	60.856	133.473	1.00	0.00
	ATOM 1225	NE1	TRP B 161	48.718	61.079	133.743	1.00	0.00
	ATOM 1226	CE2	TRP B 161	47.666	61.557	132.988	1.00	0.00
15	ATOM 1227	CE3	TRP B 161	45.287	61.127	132.849	1.00	0.00
	ATOM 1228	CZ2	TRP B 161	47.582	62.491	131.945	1.00	0.00
	ATOM 1229	CZ3	TRP B 161	45.196	62.043	131.787	1.00	0.00
	ATOM 1230	CH2	TRP B 161	46.337	62.737	131.347	1.00	0.00
	ATOM 1231	N	ALA B 162	42.805	58.618	136.068	1.00	0.00
20	ATOM 1232	CA	ALA B 162	41.882	57.504	136.219	1.00	0.00
	ATOM 1233	C	ALA B 162	42.040	56.620	134.983	1.00	0.00
	ATOM 1234	O	ALA B 162	41.878	57.113	133.866	1.00	0.00
	ATOM 1235	CB	ALA B 162	40.454	58.037	136.349	1.00	0.00
	ATOM 1236	N	LEU B 163	42.400	55.342	135.177	1.00	0.00
25	ATOM 1237	CA	LEU B 163	42.682	54.419	134.084	1.00	0.00

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		ATOM 1238	C	LEU B 163	41.516	53.479	133.796	1.00	0.00
		ATOM 1239	O	LEU B 163	40.765	53.099	134.692	1.00	0.00
		ATOM 1240	CB	LEU B 163	43.949	53.585	134.341	1.00	0.00
		ATOM 1241	CG	LEU B 163	45.203	54.220	133.719	1.00	0.00
5		ATOM 1242	CD1	LEU B 163	45.837	55.214	134.695	1.00	0.00
		ATOM 1243	CD2	LEU B 163	46.208	53.132	133.328	1.00	0.00
		ATOM 1244	N	VAL B 164	41.430	53.072	132.527	1.00	0.00
		ATOM 1245	CA	VAL B 164	40.582	51.996	132.051	1.00	0.00
		ATOM 1246	C	VAL B 164	41.510	50.960	131.419	1.00	0.00
10		ATOM 1247	O	VAL B 164	42.344	51.316	130.587	1.00	0.00
		ATOM 1248	CB	VAL B 164	39.549	52.533	131.052	1.00	0.00
		ATOM 1249	CG1	VAL B 164	38.554	51.427	130.686	1.00	0.00
		ATOM 1250	CG2	VAL B 164	38.786	53.738	131.619	1.00	0.00
		ATOM 1251	N	GLY B 165	41.386	49.705	131.873	1.00	0.00
15		ATOM 1252	CA	GLY B 165	42.319	48.620	131.604	1.00	0.00
		ATOM 1253	C	GLY B 165	42.206	48.085	130.172	1.00	0.00
		ATOM 1254	O	GLY B 165	42.163	48.885	129.245	1.00	0.00
		ATOM 1255	N	PRO B 166	42.194	46.755	129.961	1.00	0.00
		ATOM 1256	CA	PRO B 166	42.438	46.139	128.660	1.00	0.00
20		ATOM 1257	C	PRO B 166	41.268	46.341	127.691	1.00	0.00
		ATOM 1258	O	PRO B 166	40.439	45.454	127.497	1.00	0.00
		ATOM 1259	CB	PRO B 166	42.722	44.663	128.961	1.00	0.00
		ATOM 1260	CG	PRO B 166	41.919	44.410	130.234	1.00	0.00
		ATOM 1261	CD	PRO B 166	42.078	45.730	130.986	1.00	0.00
25		ATOM 1262	N	LEU B 167	41.232	47.517	127.064	1.00	0.00

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	ATOM 1263	CA	LEU B 167	40.252	47.922	126.074	1.00	0.00
	ATOM 1264	C	LEU B 167	40.550	47.284	124.717	1.00	0.00
	ATOM 1265	O	LEU B 167	41.698	46.944	124.432	1.00	0.00
	ATOM 1266	CB	LEU B 167	40.276	49.453	125.939	1.00	0.00
5	ATOM 1267	CG	LEU B 167	39.588	50.161	127.113	1.00	0.00
	ATOM 1268	CD1	LEU B 167	40.004	51.635	127.125	1.00	0.00
	ATOM 1269	CD2	LEU B 167	38.061	50.070	126.995	1.00	0.00
	ATOM 1270	N	PRO B 168	39.525	47.144	123.863	1.00	0.00
	ATOM 1271	CA	PRO B 168	39.675	46.638	122.510	1.00	0.00
10	ATOM 1272	C	PRO B 168	40.520	47.583	121.646	1.00	0.00
	ATOM 1273	O	PRO B 168	40.561	48.792	121.885	1.00	0.00
	ATOM 1274	CB	PRO B 168	38.248	46.477	121.976	1.00	0.00
	ATOM 1275	CG	PRO B 168	37.420	47.455	122.809	1.00	0.00
	ATOM 1276	CD	PRO B 168	38.135	47.462	124.154	1.00	0.00
15	ATOM 1277	N	LEU B 169	41.191	47.009	120.636	1.00	0.00
	ATOM 1278	CA	LEU B 169	42.043	47.711	119.678	1.00	0.00
	ATOM 1279	C	LEU B 169	41.337	48.878	118.986	1.00	0.00
	ATOM 1280	O	LEU B 169	41.992	49.856	118.629	1.00	0.00
	ATOM 1281	CB	LEU B 169	42.605	46.738	118.630	1.00	0.00
20	ATOM 1282	CG	LEU B 169	41.532	45.911	117.895	1.00	0.00
	ATOM 1283	CD1	LEU B 169	41.597	46.163	116.385	1.00	0.00
	ATOM 1284	CD2	LEU B 169	41.722	44.416	118.175	1.00	0.00
	ATOM 1285	N	GLU B 170	40.020	48.764	118.785	1.00	0.00
	ATOM 1286	CA	GLU B 170	39.180	49.777	118.172	1.00	0.00
25	ATOM 1287	C	GLU B 170	37.916	49.962	119.009	1.00	0.00

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		ATOM 1288	O	GLU B 170	37.567	49.103	119.818	1.00	0.00
		ATOM 1289	CB	GLU B 170	38.838	49.375	116.730	1.00	0.00
		ATOM 1290	CG	GLU B 170	38.080	48.044	116.639	1.00	0.00
		ATOM 1291	CD	GLU B 170	37.741	47.714	115.191	1.00	0.00
5		ATOM 1292	OE1	GLU B 170	36.607	48.044	114.786	1.00	0.00
		ATOM 1293	OE2	GLU B 170	38.628	47.146	114.520	1.00	0.00
		ATOM 1294	N	ALA B 171	37.217	51.075	118.781	1.00	0.00
		ATOM 1295	CA	ALA B 171	35.870	51.312	119.269	1.00	0.00
		ATOM 1296	C	ALA B 171	35.246	52.375	118.375	1.00	0.00
10		ATOM 1297	O	ALA B 171	35.809	53.456	118.235	1.00	0.00
		ATOM 1298	CB	ALA B 171	35.891	51.774	120.728	1.00	0.00
		ATOM 1299	N	LEU B 172	34.098	52.069	117.764	1.00	0.00
		ATOM 1300	CA	LEU B 172	33.393	52.989	116.878	1.00	0.00
		ATOM 1301	C	LEU B 172	32.760	54.132	117.678	1.00	0.00
15		ATOM 1302	O	LEU B 172	32.621	55.242	117.168	1.00	0.00
		ATOM 1303	CB	LEU B 172	32.321	52.232	116.080	1.00	0.00
		ATOM 1304	CG	LEU B 172	32.875	51.428	114.889	1.00	0.00
		ATOM 1305	CD1	LEU B 172	33.840	50.308	115.300	1.00	0.00
		ATOM 1306	CD2	LEU B 172	31.700	50.817	114.117	1.00	0.00
20		ATOM 1307	N	GLN B 173	32.351	53.850	118.920	1.00	0.00
		ATOM 1308	CA	GLN B 173	31.693	54.782	119.821	1.00	0.00
		ATOM 1309	C	GLN B 173	31.810	54.197	121.228	1.00	0.00
		ATOM 1310	O	GLN B 173	31.382	53.067	121.448	1.00	0.00
		ATOM 1311	CB	GLN B 173	30.227	54.927	119.398	1.00	0.00
25		ATOM 1312	CG	GLN B 173	29.388	55.781	120.358	1.00	0.00

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		ATOM 1313	CD	GLN B 173	27.909	55.697	119.994	1.00	0.00
		ATOM 1314	OE1	GLN B 173	27.074	55.375	120.835	1.00	0.00
		ATOM 1315	NE2	GLN B 173	27.579	55.960	118.730	1.00	0.00
		ATOM 1316	N	TYR B 174	32.397	54.946	122.165	1.00	0.00
5		ATOM 1317	CA	TYR B 174	32.601	54.540	123.549	1.00	0.00
		ATOM 1318	C	TYR B 174	32.192	55.698	124.455	1.00	0.00
		ATOM 1319	O	TYR B 174	32.834	56.746	124.434	1.00	0.00
		ATOM 1320	CB	TYR B 174	34.074	54.171	123.751	1.00	0.00
		ATOM 1321	CG	TYR B 174	34.465	53.922	125.197	1.00	0.00
10		ATOM 1322	CD1	TYR B 174	34.288	52.650	125.771	1.00	0.00
		ATOM 1323	CD2	TYR B 174	35.015	54.964	125.967	1.00	0.00
		ATOM 1324	CE1	TYR B 174	34.680	52.417	127.102	1.00	0.00
		ATOM 1325	CE2	TYR B 174	35.420	54.728	127.291	1.00	0.00
		ATOM 1326	CZ	TYR B 174	35.245	53.457	127.862	1.00	0.00
15		ATOM 1327	OH	TYR B 174	35.631	53.237	129.151	1.00	0.00
		ATOM 1328	N	GLU B 175	31.126	55.508	125.238	1.00	0.00
		ATOM 1329	CA	GLU B 175	30.592	56.511	126.144	1.00	0.00
		ATOM 1330	C	GLU B 175	31.331	56.473	127.482	1.00	0.00
		ATOM 1331	O	GLU B 175	31.624	55.401	128.011	1.00	0.00
20		ATOM 1332	CB	GLU B 175	29.085	56.281	126.296	1.00	0.00
		ATOM 1333	CG	GLU B 175	28.399	57.316	127.194	1.00	0.00
		ATOM 1334	CD	GLU B 175	26.888	57.116	127.173	1.00	0.00
		ATOM 1335	OE1	GLU B 175	26.322	57.296	126.073	1.00	0.00
		ATOM 1336	OE2	GLU B 175	26.337	56.777	128.243	1.00	0.00
25		ATOM 1337	N	LEU B 176	31.636	57.659	128.015	1.00	0.00

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		ATOM 1338	CA	LEU B 176	32.331	57.861	129.274	1.00	0.00
		ATOM 1339	C	LEU B 176	31.589	58.994	129.983	1.00	0.00
		ATOM 1340	O	LEU B 176	31.577	60.109	129.468	1.00	0.00
		ATOM 1341	CB	LEU B 176	33.793	58.213	128.949	1.00	0.00
5		ATOM 1342	CG	LEU B 176	34.701	58.415	130.171	1.00	0.00
		ATOM 1343	CD1	LEU B 176	34.965	57.100	130.914	1.00	0.00
		ATOM 1344	CD2	LEU B 176	36.041	59.000	129.706	1.00	0.00
		ATOM 1345	N	CYS B 177	30.921	58.704	131.109	1.00	0.00
		ATOM 1346	CA	CYS B 177	30.029	59.644	131.790	1.00	0.00
10		ATOM 1347	C	CYS B 177	30.399	59.810	133.265	1.00	0.00
		ATOM 1348	O	CYS B 177	31.294	59.138	133.774	1.00	0.00
		ATOM 1349	CB	CYS B 177	28.562	59.223	131.621	1.00	0.00
		ATOM 1350	SG	CYS B 177	27.797	59.428	129.985	1.00	0.00
		ATOM 1351	N	GLY B 178	29.706	60.730	133.947	1.00	0.00
15		ATOM 1352	CA	GLY B 178	29.938	61.048	135.348	1.00	0.00
		ATOM 1353	C	GLY B 178	31.231	61.839	135.541	1.00	0.00
		ATOM 1354	O	GLY B 178	31.890	61.711	136.571	1.00	0.00
		ATOM 1355	N	LEU B 179	31.585	62.671	134.558	1.00	0.00
		ATOM 1356	CA	LEU B 179	32.782	63.495	134.565	1.00	0.00
20		ATOM 1357	C	LEU B 179	32.393	64.911	134.999	1.00	0.00
		ATOM 1358	O	LEU B 179	32.236	65.798	134.163	1.00	0.00
		ATOM 1359	CB	LEU B 179	33.380	63.490	133.153	1.00	0.00
		ATOM 1360	CG	LEU B 179	33.779	62.117	132.595	1.00	0.00
		ATOM 1361	CD1	LEU B 179	34.234	62.325	131.147	1.00	0.00
25		ATOM 1362	CD2	LEU B 179	34.908	61.458	133.394	1.00	0.00

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		ATOM 1363	N	LEU B 180	32.194	65.115	136.305	1.00	0.00
		ATOM 1364	CA	LEU B 180	31.612	66.340	136.843	1.00	0.00
		ATOM 1365	C	LEU B 180	32.622	67.454	137.177	1.00	0.00
		ATOM 1366	O	LEU B 180	32.384	68.590	136.771	1.00	0.00
5		ATOM 1367	CB	LEU B 180	30.687	66.018	138.028	1.00	0.00
		ATOM 1368	CG	LEU B 180	29.616	64.955	137.714	1.00	0.00
		ATOM 1369	CD1	LEU B 180	28.770	64.709	138.967	1.00	0.00
		ATOM 1370	CD2	LEU B 180	28.694	65.372	136.561	1.00	0.00
		ATOM 1371	N	PRO B 181	33.709	67.217	137.940	1.00	0.00
10		ATOM 1372	CA	PRO B 181	34.438	68.295	138.614	1.00	0.00
		ATOM 1373	C	PRO B 181	35.274	69.242	137.733	1.00	0.00
		ATOM 1374	O	PRO B 181	35.984	70.083	138.285	1.00	0.00
		ATOM 1375	CB	PRO B 181	35.298	67.608	139.685	1.00	0.00
		ATOM 1376	CG	PRO B 181	35.501	66.207	139.118	1.00	0.00
15		ATOM 1377	CD	PRO B 181	34.144	65.936	138.477	1.00	0.00
		ATOM 1378	N	ALA B 182	35.189	69.175	136.399	1.00	0.00
		ATOM 1379	CA	ALA B 182	35.712	70.226	135.528	1.00	0.00
		ATOM 1380	C	ALA B 182	35.017	70.152	134.170	1.00	0.00
		ATOM 1381	O	ALA B 182	34.640	69.068	133.739	1.00	0.00
20		ATOM 1382	CB	ALA B 182	37.232	70.097	135.369	1.00	0.00
		ATOM 1383	N	THR B 183	34.861	71.279	133.467	1.00	0.00
		ATOM 1384	CA	THR B 183	34.276	71.295	132.127	1.00	0.00
		ATOM 1385	C	THR B 183	35.374	71.153	131.064	1.00	0.00
		ATOM 1386	O	THR B 183	35.301	71.772	130.001	1.00	0.00
25		ATOM 1387	CB	THR B 183	33.440	72.573	131.953	1.00	0.00

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		ATOM 1388	OG1	THR	B	183	34.244	73.718	132.164	1.00	0.00
		ATOM 1389	CG2	THR	B	183	32.270	72.596	132.941	1.00	0.00
		ATOM 1390	N	ALA	B	184	36.399	70.342	131.363	1.00	0.00
		ATOM 1391	CA	ALA	B	184	37.593	70.150	130.554	1.00	0.00
5		ATOM 1392	C	ALA	B	184	38.384	68.970	131.123	1.00	0.00
		ATOM 1393	O	ALA	B	184	38.800	69.010	132.282	1.00	0.00
		ATOM 1394	CB	ALA	B	184	38.449	71.422	130.561	1.00	0.00
		ATOM 1395	N	TYR	B	185	38.579	67.922	130.315	1.00	0.00
		ATOM 1396	CA	TYR	B	185	39.328	66.721	130.663	1.00	0.00
10		ATOM 1397	C	TYR	B	185	40.383	66.447	129.598	1.00	0.00
		ATOM 1398	O	TYR	B	185	40.115	66.648	128.415	1.00	0.00
		ATOM 1399	CB	TYR	B	185	38.379	65.517	130.743	1.00	0.00
		ATOM 1400	CG	TYR	B	185	37.637	65.383	132.056	1.00	0.00
		ATOM 1401	CD1	TYR	B	185	36.588	66.263	132.376	1.00	0.00
15		ATOM 1402	CD2	TYR	B	185	37.981	64.350	132.949	1.00	0.00
		ATOM 1403	CE1	TYR	B	185	35.908	66.124	133.597	1.00	0.00
		ATOM 1404	CE2	TYR	B	185	37.315	64.229	134.178	1.00	0.00
		ATOM 1405	CZ	TYR	B	185	36.276	65.116	134.498	1.00	0.00
		ATOM 1406	OH	TYR	B	185	35.594	64.977	135.667	1.00	0.00
20		ATOM 1407	N	THR	B	186	41.550	65.939	130.016	1.00	0.00
		ATOM 1408	CA	THR	B	186	42.559	65.415	129.105	1.00	0.00
		ATOM 1409	C	THR	B	186	42.393	63.900	129.003	1.00	0.00
		ATOM 1410	O	THR	B	186	42.247	63.246	130.033	1.00	0.00
		ATOM 1411	CB	THR	B	186	43.975	65.780	129.565	1.00	0.00
25		ATOM 1412	OG1	THR	B	186	44.114	67.187	129.557	1.00	0.00

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		ATOM 1413	CG2	THR	B	186	45.009	65.177	128.607	1.00	0.00
		ATOM 1414	N	LEU	B	187	42.426	63.350	127.781	1.00	0.00
		ATOM 1415	CA	LEU	B	187	42.381	61.918	127.518	1.00	0.00
		ATOM 1416	C	LEU	B	187	43.569	61.512	126.644	1.00	0.00
5		ATOM 1417	O	LEU	B	187	43.957	62.261	125.746	1.00	0.00
		ATOM 1418	CB	LEU	B	187	41.077	61.528	126.812	1.00	0.00
		ATOM 1419	CG	LEU	B	187	39.812	61.686	127.671	1.00	0.00
		ATOM 1420	CD1	LEU	B	187	39.253	63.113	127.656	1.00	0.00
		ATOM 1421	CD2	LEU	B	187	38.748	60.745	127.107	1.00	0.00
10		ATOM 1422	N	GLN	B	188	44.131	60.322	126.893	1.00	0.00
		ATOM 1423	CA	GLN	B	188	45.137	59.695	126.040	1.00	0.00
		ATOM 1424	C	GLN	B	188	44.956	58.181	126.104	1.00	0.00
		ATOM 1425	O	GLN	B	188	44.467	57.661	127.107	1.00	0.00
		ATOM 1426	CB	GLN	B	188	46.561	60.009	126.506	1.00	0.00
15		ATOM 1427	CG	GLN	B	188	46.918	61.492	126.616	1.00	0.00
		ATOM 1428	CD	GLN	B	188	48.304	61.659	127.231	1.00	0.00
		ATOM 1429	OE1	GLN	B	188	48.441	61.717	128.452	1.00	0.00
		ATOM 1430	NE2	GLN	B	188	49.344	61.708	126.401	1.00	0.00
		ATOM 1431	N	ILE	B	189	45.390	57.480	125.055	1.00	0.00
20		ATOM 1432	CA	ILE	B	189	45.294	56.034	124.925	1.00	0.00
		ATOM 1433	C	ILE	B	189	46.637	55.500	124.408	1.00	0.00
		ATOM 1434	O	ILE	B	189	47.362	56.214	123.720	1.00	0.00
		ATOM 1435	CB	ILE	B	189	44.091	55.692	124.018	1.00	0.00
		ATOM 1436	CG1	ILE	B	189	43.829	54.182	123.866	1.00	0.00
25		ATOM 1437	CG2	ILE	B	189	44.282	56.386	122.671	1.00	0.00

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	ATOM 1438	CD1	ILE	B	189	42.612	53.831	122.998	1.00	0.00
	ATOM 1439	N	ARG	B	190	46.985	54.259	124.751	1.00	0.00
	ATOM 1440	CA	ARG	B	190	48.176	53.562	124.267	1.00	0.00
	ATOM 1441	C	ARG	B	190	47.773	52.112	124.032	1.00	0.00
5	ATOM 1442	O	ARG	B	190	46.798	51.669	124.637	1.00	0.00
	ATOM 1443	CB	ARG	B	190	49.314	53.650	125.297	1.00	0.00
	ATOM 1444	CG	ARG	B	190	48.998	52.773	126.516	1.00	0.00
	ATOM 1445	CD	ARG	B	190	49.806	53.111	127.761	1.00	0.00
	ATOM 1446	NE	ARG	B	190	51.142	52.513	127.842	1.00	0.00
10	ATOM 1447	CZ	ARG	B	190	51.646	51.949	128.956	1.00	0.00
	ATOM 1448	NH1	ARG	B	190	50.858	51.421	129.901	1.00	0.00
	ATOM 1449	NH2	ARG	B	190	52.972	51.918	129.132	1.00	0.00
	ATOM 1450	N	CYS	B	191	48.505	51.372	123.193	1.00	0.00
	ATOM 1451	CA	CYS	B	191	48.151	49.997	122.865	1.00	0.00
15	ATOM 1452	C	CYS	B	191	49.381	49.098	122.866	1.00	0.00
	ATOM 1453	O	CYS	B	191	50.513	49.575	122.782	1.00	0.00
	ATOM 1454	CB	CYS	B	191	47.392	49.935	121.535	1.00	0.00
	ATOM 1455	SG	CYS	B	191	45.894	50.954	121.414	1.00	0.00
	ATOM 1456	N	ILE	B	192	49.145	47.789	122.993	1.00	0.00
20	ATOM 1457	CA	ILE	B	192	50.176	46.763	123.002	1.00	0.00
	ATOM 1458	C	ILE	B	192	49.636	45.513	122.322	1.00	0.00
	ATOM 1459	O	ILE	B	192	48.434	45.251	122.361	1.00	0.00
	ATOM 1460	CB	ILE	B	192	50.626	46.467	124.443	1.00	0.00
	ATOM 1461	CG1	ILE	B	192	51.874	45.572	124.480	1.00	0.00
25	ATOM 1462	CG2	ILE	B	192	49.500	45.841	125.278	1.00	0.00

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	ATOM 1463	CD1	ILE	B	192	52.578	45.658	125.837	1.00	0.00
	ATOM 1464	N	ARG	B	193	50.539	44.735	121.722	1.00	0.00
	ATOM 1465	CA	ARG	B	193	50.220	43.479	121.065	1.00	0.00
	ATOM 1466	C	ARG	B	193	49.427	42.557	122.001	1.00	0.00
5	ATOM 1467	O	ARG	B	193	49.805	42.382	123.160	1.00	0.00
	ATOM 1468	CB	ARG	B	193	51.531	42.824	120.621	1.00	0.00
	ATOM 1469	CG	ARG	B	193	51.309	41.699	119.605	1.00	0.00
	ATOM 1470	CD	ARG	B	193	52.668	41.054	119.343	1.00	0.00
	ATOM 1471	NE	ARG	B	193	52.667	40.096	118.229	1.00	0.00
10	ATOM 1472	CZ	ARG	B	193	53.727	39.312	117.957	1.00	0.00
	ATOM 1473	NH1	ARG	B	193	54.782	39.302	118.782	1.00	0.00
	ATOM 1474	NH2	ARG	B	193	53.733	38.533	116.868	1.00	0.00
	ATOM 1475	N	TRP	B	194	48.325	41.987	121.489	1.00	0.00
	ATOM 1476	CA	TRP	B	194	47.453	41.053	122.201	1.00	0.00
15	ATOM 1477	C	TRP	B	194	48.256	39.784	122.488	1.00	0.00
	ATOM 1478	O	TRP	B	194	49.040	39.402	121.623	1.00	0.00
	ATOM 1479	CB	TRP	B	194	46.226	40.734	121.327	1.00	0.00
	ATOM 1480	CG	TRP	B	194	44.884	40.668	121.985	1.00	0.00
	ATOM 1481	CD1	TRP	B	194	44.361	41.632	122.771	1.00	0.00
20	ATOM 1482	CD2	TRP	B	194	43.835	39.665	121.840	1.00	0.00
	ATOM 1483	NE1	TRP	B	194	43.077	41.299	123.143	1.00	0.00
	ATOM 1484	CE2	TRP	B	194	42.696	40.097	122.582	1.00	0.00
	ATOM 1485	CE3	TRP	B	194	43.721	38.442	121.144	1.00	0.00
	ATOM 1486	CZ2	TRP	B	194	41.506	39.355	122.630	1.00	0.00
25	ATOM 1487	CZ3	TRP	B	194	42.528	37.695	121.177	1.00	0.00

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		ATOM 1488	CH2	TRP	B	194	41.423	38.148	121.919	1.00	0.00
		ATOM 1489	N	PRO	B	195	48.093	39.162	123.674	1.00	0.00
		ATOM 1490	CA	PRO	B	195	49.047	38.295	124.359	1.00	0.00
		ATOM 1491	C	PRO	B	195	50.060	37.540	123.489	1.00	0.00
5		ATOM 1492	O	PRO	B	195	49.998	36.324	123.326	1.00	0.00
		ATOM 1493	CB	PRO	B	195	48.240	37.425	125.334	1.00	0.00
		ATOM 1494	CG	PRO	B	195	46.816	37.987	125.276	1.00	0.00
		ATOM 1495	CD	PRO	B	195	46.951	39.325	124.552	1.00	0.00
		ATOM 1496	N	LEU	B	196	51.036	38.305	122.996	1.00	0.00
10		ATOM 1497	CA	LEU	B	196	52.252	37.895	122.326	1.00	0.00
		ATOM 1498	C	LEU	B	196	53.282	38.969	122.687	1.00	0.00
		ATOM 1499	O	LEU	B	196	52.892	40.084	123.040	1.00	0.00
		ATOM 1500	CB	LEU	B	196	52.064	37.863	120.800	1.00	0.00
		ATOM 1501	CG	LEU	B	196	51.449	36.580	120.228	1.00	0.00
15		ATOM 1502	CD1	LEU	B	196	51.101	36.808	118.753	1.00	0.00
		ATOM 1503	CD2	LEU	B	196	52.431	35.404	120.324	1.00	0.00
		ATOM 1504	N	PRO	B	197	54.586	38.669	122.608	1.00	0.00
		ATOM 1505	CA	PRO	B	197	55.626	39.611	122.989	1.00	0.00
		ATOM 1506	C	PRO	B	197	55.537	40.917	122.193	1.00	0.00
20		ATOM 1507	O	PRO	B	197	55.353	40.898	120.976	1.00	0.00
		ATOM 1508	CB	PRO	B	197	56.945	38.879	122.741	1.00	0.00
		ATOM 1509	CG	PRO	B	197	56.564	37.404	122.850	1.00	0.00
		ATOM 1510	CD	PRO	B	197	55.160	37.379	122.257	1.00	0.00
		ATOM 1511	N	GLY	B	198	55.642	42.057	122.881	1.00	0.00
25		ATOM 1512	CA	GLY	B	198	55.568	43.357	122.243	1.00	0.00

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		ATOM 1513	C	GLY B 198	55.675	44.482	123.265	1.00	0.00
		ATOM 1514	O	GLY B 198	55.490	44.268	124.463	1.00	0.00
		ATOM 1515	N	HIS B 199	55.981	45.683	122.766	1.00	0.00
		ATOM 1516	CA	HIS B 199	56.168	46.887	123.559	1.00	0.00
5		ATOM 1517	C	HIS B 199	54.865	47.681	123.614	1.00	0.00
		ATOM 1518	O	HIS B 199	54.097	47.674	122.653	1.00	0.00
		ATOM 1519	CB	HIS B 199	57.260	47.747	122.910	1.00	0.00
		ATOM 1520	CG	HIS B 199	58.541	47.000	122.643	1.00	0.00
		ATOM 1521	ND1	HIS B 199	59.028	46.787	121.361	1.00	0.00
10		ATOM 1522	CD2	HIS B 199	59.444	46.391	123.481	1.00	0.00
		ATOM 1523	CE1	HIS B 199	60.185	46.116	121.487	1.00	0.00
		ATOM 1524	NE2	HIS B 199	60.493	45.837	122.754	1.00	0.00
		ATOM 1525	N	TRP B 200	54.643	48.411	124.713	1.00	0.00
		ATOM 1526	CA	TRP B 200	53.620	49.445	124.738	1.00	0.00
15		ATOM 1527	C	TRP B 200	53.981	50.523	123.723	1.00	0.00
		ATOM 1528	O	TRP B 200	55.145	50.912	123.633	1.00	0.00
		ATOM 1529	CB	TRP B 200	53.532	50.089	126.127	1.00	0.00
		ATOM 1530	CG	TRP B 200	52.734	49.335	127.138	1.00	0.00
		ATOM 1531	CD1	TRP B 200	53.215	48.735	128.249	1.00	0.00
20		ATOM 1532	CD2	TRP B 200	51.296	49.103	127.151	1.00	0.00
		ATOM 1533	NE1	TRP B 200	52.181	48.149	128.949	1.00	0.00
		ATOM 1534	CE2	TRP B 200	50.974	48.335	128.306	1.00	0.00
		ATOM 1535	CE3	TRP B 200	50.232	49.460	126.299	1.00	0.00
		ATOM 1536	CZ2	TRP B 200	49.665	47.923	128.588	1.00	0.00
25		ATOM 1537	CZ3	TRP B 200	48.916	49.042	126.566	1.00	0.00

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	ATOM 1538	CH2	TRP	B	200	48.638	48.250	127.691	1.00	0.00
	ATOM 1539	N	SER	B	201	52.985	51.043	123.001	1.00	0.00
	ATOM 1540	CA	SER	B	201	53.165	52.286	122.273	1.00	0.00
	ATOM 1541	C	SER	B	201	53.298	53.434	123.277	1.00	0.00
5	ATOM 1542	O	SER	B	201	52.948	53.288	124.451	1.00	0.00
	ATOM 1543	CB	SER	B	201	51.985	52.517	121.322	1.00	0.00
	ATOM 1544	OG	SER	B	201	50.791	52.752	122.039	1.00	0.00
	ATOM 1545	N	ASP	B	202	53.774	54.595	122.818	1.00	0.00
	ATOM 1546	CA	ASP	B	202	53.663	55.801	123.622	1.00	0.00
10	ATOM 1547	C	ASP	B	202	52.181	56.176	123.738	1.00	0.00
	ATOM 1548	O	ASP	B	202	51.342	55.687	122.980	1.00	0.00
	ATOM 1549	CB	ASP	B	202	54.505	56.927	123.003	1.00	0.00
	ATOM 1550	CG	ASP	B	202	54.596	58.172	123.886	1.00	0.00
	ATOM 1551	OD1	ASP	B	202	54.348	58.044	125.107	1.00	0.00
15	ATOM 1552	OD2	ASP	B	202	54.925	59.237	123.322	1.00	0.00
	ATOM 1553	N	TRP	B	203	51.851	57.041	124.693	1.00	0.00
	ATOM 1554	CA	TRP	B	203	50.512	57.586	124.803	1.00	0.00
	ATOM 1555	C	TRP	B	203	50.231	58.489	123.605	1.00	0.00
	ATOM 1556	O	TRP	B	203	51.093	59.258	123.183	1.00	0.00
20	ATOM 1557	CB	TRP	B	203	50.369	58.359	126.113	1.00	0.00
	ATOM 1558	CG	TRP	B	203	50.391	57.527	127.356	1.00	0.00
	ATOM 1559	CD1	TRP	B	203	51.459	57.338	128.161	1.00	0.00
	ATOM 1560	CD2	TRP	B	203	49.314	56.736	127.937	1.00	0.00
	ATOM 1561	NE1	TRP	B	203	51.109	56.535	129.227	1.00	0.00
25	ATOM 1562	CE2	TRP	B	203	49.784	56.157	129.152	1.00	0.00

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	ATOM 1563	CE3	TRP	B	203	47.998	56.418	127.541	1.00	0.00
	ATOM 1564	CZ2	TRP	B	203	48.976	55.334	129.953	1.00	0.00
	ATOM 1565	CZ3	TRP	B	203	47.220	55.508	128.281	1.00	0.00
	ATOM 1566	CH2	TRP	B	203	47.685	55.008	129.510	1.00	0.00
5	ATOM 1567	N	SER	B	204	49.011	58.411	123.069	1.00	0.00
	ATOM 1568	CA	SER	B	204	48.543	59.316	122.036	1.00	0.00
	ATOM 1569	C	SER	B	204	48.587	60.756	122.560	1.00	0.00
	ATOM 1570	O	SER	B	204	48.536	60.971	123.772	1.00	0.00
	ATOM 1571	CB	SER	B	204	47.122	58.908	121.625	1.00	0.00
10	ATOM 1572	OG	SER	B	204	46.249	58.991	122.732	1.00	0.00
	ATOM 1573	N	PRO	B	205	48.694	61.757	121.674	1.00	0.00
	ATOM 1574	CA	PRO	B	205	48.708	63.151	122.080	1.00	0.00
	ATOM 1575	C	PRO	B	205	47.402	63.531	122.789	1.00	0.00
	ATOM 1576	O	PRO	B	205	46.335	63.006	122.473	1.00	0.00
15	ATOM 1577	CB	PRO	B	205	48.945	63.955	120.799	1.00	0.00
	ATOM 1578	CG	PRO	B	205	48.469	63.020	119.687	1.00	0.00
	ATOM 1579	CD	PRO	B	205	48.810	61.635	120.231	1.00	0.00
	ATOM 1580	N	SER	B	206	47.523	64.428	123.774	1.00	0.00
	ATOM 1581	CA	SER	B	206	46.469	64.881	124.668	1.00	0.00
20	ATOM 1582	C	SER	B	206	45.232	65.384	123.925	1.00	0.00
	ATOM 1583	O	SER	B	206	45.287	66.437	123.291	1.00	0.00
	ATOM 1584	CB	SER	B	206	47.051	66.001	125.537	1.00	0.00
	ATOM 1585	OG	SER	B	206	48.146	65.503	126.280	1.00	0.00
	ATOM 1586	N	LEU	B	207	44.102	64.678	124.062	1.00	0.00
25	ATOM 1587	CA	LEU	B	207	42.802	65.220	123.690	1.00	0.00

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		ATOM 1588	C	LEU B 207	42.270	66.025	124.869	1.00	0.00
		ATOM 1589	O	LEU B 207	42.012	65.441	125.914	1.00	0.00
		ATOM 1590	CB	LEU B 207	41.804	64.096	123.363	1.00	0.00
		ATOM 1591	CG	LEU B 207	41.664	63.754	121.874	1.00	0.00
5		ATOM 1592	CD1	LEU B 207	40.563	62.696	121.743	1.00	0.00
		ATOM 1593	CD2	LEU B 207	41.260	64.967	121.022	1.00	0.00
		ATOM 1594	N	GLU B 208	42.074	67.336	124.690	1.00	0.00
		ATOM 1595	CA	GLU B 208	41.389	68.194	125.647	1.00	0.00
		ATOM 1596	C	GLU B 208	39.922	68.310	125.224	1.00	0.00
10		ATOM 1597	O	GLU B 208	39.630	68.989	124.241	1.00	0.00
		ATOM 1598	CB	GLU B 208	42.060	69.573	125.691	1.00	0.00
		ATOM 1599	CG	GLU B 208	43.507	69.483	126.192	1.00	0.00
		ATOM 1600	CD	GLU B 208	44.141	70.864	126.328	1.00	0.00
		ATOM 1601	OE1	GLU B 208	43.475	71.742	126.921	1.00	0.00
15		ATOM 1602	OE2	GLU B 208	45.283	71.015	125.845	1.00	0.00
		ATOM 1603	N	LEU B 209	39.007	67.640	125.939	1.00	0.00
		ATOM 1604	CA	LEU B 209	37.588	67.590	125.596	1.00	0.00
		ATOM 1605	C	LEU B 209	36.737	68.192	126.707	1.00	0.00
		ATOM 1606	O	LEU B 209	37.013	67.975	127.886	1.00	0.00
20		ATOM 1607	CB	LEU B 209	37.139	66.143	125.362	1.00	0.00
		ATOM 1608	CG	LEU B 209	37.883	65.421	124.234	1.00	0.00
		ATOM 1609	CD1	LEU B 209	37.331	63.994	124.128	1.00	0.00
		ATOM 1610	CD2	LEU B 209	37.719	66.146	122.893	1.00	0.00
		ATOM 1611	N	ARG B 210	35.678	68.913	126.320	1.00	0.00
25		ATOM 1612	CA	ARG B 210	34.672	69.398	127.247	1.00	0.00

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	ATOM 1613	C	ARG B 210	33.569	68.359	127.374	1.00	0.00
	ATOM 1614	O	ARG B 210	33.026	67.892	126.372	1.00	0.00
	ATOM 1615	CB	ARG B 210	34.054	70.715	126.775	1.00	0.00
	ATOM 1616	CG	ARG B 210	35.085	71.831	126.602	1.00	0.00
5	ATOM 1617	CD	ARG B 210	34.355	73.176	126.527	1.00	0.00
	ATOM 1618	NE	ARG B 210	35.291	74.306	126.581	1.00	0.00
	ATOM 1619	CZ	ARG B 210	35.765	74.862	127.709	1.00	0.00
	ATOM 1620	NH1	ARG B 210	35.490	74.335	128.911	1.00	0.00
	ATOM 1621	NH2	ARG B 210	36.528	75.960	127.629	1.00	0.00
10	ATOM 1622	N	THR B 211	33.225	68.032	128.615	1.00	0.00
	ATOM 1623	CA	THR B 211	32.086	67.210	128.958	1.00	0.00
	ATOM 1624	C	THR B 211	30.791	67.953	128.616	1.00	0.00
	ATOM 1625	O	THR B 211	30.795	69.177	128.487	1.00	0.00
	ATOM 1626	CB	THR B 211	32.187	66.931	130.461	1.00	0.00
15	ATOM 1627	OG1	THR B 211	32.446	68.135	131.157	1.00	0.00
	ATOM 1628	CG2	THR B 211	33.344	65.971	130.737	1.00	0.00
	ATOM 1629	N	THR B 212	29.677	67.222	128.479	1.00	0.00
	ATOM 1630	CA	THR B 212	28.365	67.854	128.396	1.00	0.00
	ATOM 1631	C	THR B 212	28.149	68.697	129.656	1.00	0.00
20	ATOM 1632	O	THR B 212	28.263	68.163	130.756	1.00	0.00
	ATOM 1633	CB	THR B 212	27.271	66.784	128.249	1.00	0.00
	ATOM 1634	OG1	THR B 212	27.475	66.067	127.048	1.00	0.00
	ATOM 1635	CG2	THR B 212	25.873	67.410	128.203	1.00	0.00
	ATOM 1636	N	GLU B 213	27.838	69.988	129.485	1.00	0.00
25	ATOM 1637	CA	GLU B 213	27.591	70.947	130.556	1.00	0.00

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	ATOM 1638	C	GLU B 213	28.914	71.371	131.206	1.00	0.00
	ATOM 1639	O	GLU B 213	29.418	70.594	132.046	1.00	0.00
	ATOM 1640	CB	GLU B 213	26.551	70.402	131.552	1.00	0.00
	ATOM 1641	CG	GLU B 213	25.879	71.504	132.379	1.00	0.00
5	ATOM 1642	CD	GLU B 213	24.793	70.913	133.271	1.00	0.00
	ATOM 1643	OE1	GLU B 213	25.029	70.842	134.497	1.00	0.00
	ATOM 1644	OE2	GLU B 213	23.745	70.530	132.705	1.00	0.00
	ATOM 1646	N	GLY D 2	96.914	43.278	139.815	1.00	0.00
	ATOM 1647	CA	GLY D 2	95.996	44.318	140.308	1.00	0.00
10	ATOM 1648	C	GLY D 2	95.266	43.826	141.552	1.00	0.00
	ATOM 1649	O	GLY D 2	94.984	42.634	141.651	1.00	0.00
	ATOM 1650	N	TYR D 3	95.003	44.733	142.498	1.00	0.00
	ATOM 1651	CA	TYR D 3	94.461	44.428	143.818	1.00	0.00
	ATOM 1652	C	TYR D 3	93.069	45.000	144.126	1.00	0.00
15	ATOM 1653	O	TYR D 3	92.353	44.371	144.907	1.00	0.00
	ATOM 1654	CB	TYR D 3	95.466	44.852	144.893	1.00	0.00
	ATOM 1655	CG	TYR D 3	96.771	44.082	145.001	1.00	0.00
	ATOM 1656	CD1	TYR D 3	96.859	42.715	144.678	1.00	0.00
	ATOM 1657	CD2	TYR D 3	97.900	44.736	145.530	1.00	0.00
20	ATOM 1658	CE1	TYR D 3	98.056	42.012	144.883	1.00	0.00
	ATOM 1659	CE2	TYR D 3	99.099	44.035	145.732	1.00	0.00
	ATOM 1660	CZ	TYR D 3	99.177	42.671	145.410	1.00	0.00
	ATOM 1661	OH	TYR D 3	100.342	41.988	145.585	1.00	0.00
	ATOM 1662	N	PRO D 4	92.648	46.161	143.590	1.00	0.00
25	ATOM 1663	CA	PRO D 4	91.307	46.668	143.839	1.00	0.00

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		ATOM 1664	C	PRO	D	4	90.259	45.658	143.355	1.00	0.00
		ATOM 1665	O	PRO	D	4	90.436	45.077	142.284	1.00	0.00
		ATOM 1666	CB	PRO	D	4	91.194	47.987	143.068	1.00	0.00
		ATOM 1667	CG	PRO	D	4	92.642	48.414	142.850	1.00	0.00
5		ATOM 1668	CD	PRO	D	4	93.396	47.091	142.762	1.00	0.00
		ATOM 1669	N	PRO	D	5	89.182	45.423	144.119	1.00	0.00
		ATOM 1670	CA	PRO	D	5	88.154	44.461	143.766	1.00	0.00
		ATOM 1671	C	PRO	D	5	87.352	44.988	142.576	1.00	0.00
		ATOM 1672	O	PRO	D	5	87.107	46.189	142.469	1.00	0.00
10		ATOM 1673	CB	PRO	D	5	87.293	44.305	145.021	1.00	0.00
		ATOM 1674	CG	PRO	D	5	87.435	45.660	145.713	1.00	0.00
		ATOM 1675	CD	PRO	D	5	88.865	46.082	145.370	1.00	0.00
		ATOM 1676	N	ALA	D	6	86.963	44.086	141.669	1.00	0.00
		ATOM 1677	CA	ALA	D	6	86.244	44.428	140.451	1.00	0.00
15		ATOM 1678	C	ALA	D	6	84.739	44.360	140.687	1.00	0.00
		ATOM 1679	O	ALA	D	6	84.286	43.675	141.601	1.00	0.00
		ATOM 1680	CB	ALA	D	6	86.653	43.464	139.336	1.00	0.00
		ATOM 1681	N	ILE	D	7	83.973	45.072	139.853	1.00	0.00
		ATOM 1682	CA	ILE	D	7	82.517	45.014	139.803	1.00	0.00
20		ATOM 1683	C	ILE	D	7	82.106	43.542	139.685	1.00	0.00
		ATOM 1684	O	ILE	D	7	82.382	42.939	138.649	1.00	0.00
		ATOM 1685	CB	ILE	D	7	82.035	45.847	138.595	1.00	0.00
		ATOM 1686	CG1	ILE	D	7	82.322	47.340	138.855	1.00	0.00
		ATOM 1687	CG2	ILE	D	7	80.540	45.636	138.309	1.00	0.00
25		ATOM 1688	CD1	ILE	D	7	82.053	48.228	137.636	1.00	0.00

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5	ATOM 1689	N	PRO	D	8	81.476	42.932	140.705	1.00	0.00
	ATOM 1690	CA	PRO	D	8	81.016	41.556	140.603	1.00	0.00
	ATOM 1691	C	PRO	D	8	79.925	41.448	139.535	1.00	0.00
	ATOM 1692	O	PRO	D	8	79.228	42.426	139.257	1.00	0.00
	ATOM 1693	CB	PRO	D	8	80.506	41.168	141.994	1.00	0.00
10	ATOM 1694	CG	PRO	D	8	81.152	42.199	142.921	1.00	0.00
	ATOM 1695	CD	PRO	D	8	81.220	43.445	142.042	1.00	0.00
	ATOM 1696	N	HIS	D	9	79.806	40.276	138.905	1.00	0.00
	ATOM 1697	CA	HIS	D	9	78.977	40.068	137.724	1.00	0.00
	ATOM 1698	C	HIS	D	9	77.928	38.982	137.957	1.00	0.00
15	ATOM 1699	O	HIS	D	9	77.946	38.286	138.970	1.00	0.00
	ATOM 1700	CB	HIS	D	9	79.879	39.698	136.536	1.00	0.00
	ATOM 1701	CG	HIS	D	9	80.777	40.807	136.044	1.00	0.00
	ATOM 1702	ND1	HIS	D	9	80.634	42.132	136.429	1.00	0.00
	ATOM 1703	CD2	HIS	D	9	81.819	40.805	135.148	1.00	0.00
20	ATOM 1704	CE1	HIS	D	9	81.554	42.845	135.757	1.00	0.00
	ATOM 1705	NE2	HIS	D	9	82.310	42.093	134.956	1.00	0.00
	ATOM 1706	N	ASN	D	10	77.024	38.849	136.980	1.00	0.00
	ATOM 1707	CA	ASN	D	10	76.086	37.748	136.812	1.00	0.00
	ATOM 1708	C	ASN	D	10	75.306	37.439	138.092	1.00	0.00
25	ATOM 1709	O	ASN	D	10	75.148	36.280	138.472	1.00	0.00
	ATOM 1710	CB	ASN	D	10	76.835	36.527	136.246	1.00	0.00
	ATOM 1711	CG	ASN	D	10	75.923	35.565	135.486	1.00	0.00
	ATOM 1712	OD1	ASN	D	10	74.798	35.903	135.129	1.00	0.00
	ATOM 1713	ND2	ASN	D	10	76.422	34.363	135.197	1.00	0.00

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	ATOM 1714	N	LEU D	11	74.819	38.495	138.754	1.00	0.00
	ATOM 1715	CA	LEU D	11	74.019	38.379	139.961	1.00	0.00
	ATOM 1716	C	LEU D	11	72.648	37.832	139.577	1.00	0.00
	ATOM 1717	O	LEU D	11	71.932	38.465	138.802	1.00	0.00
5	ATOM 1718	CB	LEU D	11	73.917	39.744	140.657	1.00	0.00
	ATOM 1719	CG	LEU D	11	72.915	39.788	141.829	1.00	0.00
	ATOM 1720	CD1	LEU D	11	73.345	38.915	143.012	1.00	0.00
	ATOM 1721	CD2	LEU D	11	72.771	41.235	142.307	1.00	0.00
	ATOM 1722	N	SER D	12	72.284	36.671	140.127	1.00	0.00
10	ATOM 1723	CA	SER D	12	70.948	36.110	140.008	1.00	0.00
	ATOM 1724	C	SER D	12	70.393	35.886	141.408	1.00	0.00
	ATOM 1725	O	SER D	12	71.157	35.791	142.369	1.00	0.00
	ATOM 1726	CB	SER D	12	70.977	34.809	139.196	1.00	0.00
	ATOM 1727	OG	SER D	12	71.412	33.722	139.987	1.00	0.00
15	ATOM 1728	N	CYS D	13	69.066	35.796	141.511	1.00	0.00
	ATOM 1729	CA	CYS D	13	68.365	35.533	142.754	1.00	0.00
	ATOM 1730	C	CYS D	13	67.217	34.577	142.467	1.00	0.00
	ATOM 1731	O	CYS D	13	66.593	34.669	141.412	1.00	0.00
	ATOM 1732	CB	CYS D	13	67.831	36.838	143.336	1.00	0.00
20	ATOM 1733	SG	CYS D	13	69.035	38.052	143.940	1.00	0.00
	ATOM 1734	N	LEU D	14	66.951	33.664	143.406	1.00	0.00
	ATOM 1735	CA	LEU D	14	65.859	32.710	143.330	1.00	0.00
	ATOM 1736	C	LEU D	14	65.193	32.582	144.695	1.00	0.00
	ATOM 1737	O	LEU D	14	65.871	32.423	145.710	1.00	0.00
25	ATOM 1738	CB	LEU D	14	66.369	31.336	142.880	1.00	0.00

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	ATOM 1739	CG	LEU	D	14	66.708	31.239	141.384	1.00	0.00
	ATOM 1740	CD1	LEU	D	14	67.309	29.860	141.096	1.00	0.00
	ATOM 1741	CD2	LEU	D	14	65.474	31.427	140.492	1.00	0.00
	ATOM 1742	N	MET	D	15	63.859	32.620	144.708	1.00	0.00
5	ATOM 1743	CA	MET	D	15	63.065	32.429	145.905	1.00	0.00
	ATOM 1744	C	MET	D	15	62.829	30.930	146.096	1.00	0.00
	ATOM 1745	O	MET	D	15	62.101	30.308	145.322	1.00	0.00
	ATOM 1746	CB	MET	D	15	61.772	33.246	145.788	1.00	0.00
	ATOM 1747	CG	MET	D	15	60.953	33.207	147.077	1.00	0.00
10	ATOM 1748	SD	MET	D	15	61.693	34.182	148.406	1.00	0.00
	ATOM 1749	CE	MET	D	15	60.678	33.624	149.790	1.00	0.00
	ATOM 1750	N	ASN	D	16	63.463	30.345	147.118	1.00	0.00
	ATOM 1751	CA	ASN	D	16	63.307	28.931	147.436	1.00	0.00
	ATOM 1752	C	ASN	D	16	62.246	28.784	148.519	1.00	0.00
15	ATOM 1753	O	ASN	D	16	62.422	29.261	149.640	1.00	0.00
	ATOM 1754	CB	ASN	D	16	64.642	28.305	147.855	1.00	0.00
	ATOM 1755	CG	ASN	D	16	65.489	27.960	146.632	1.00	0.00
	ATOM 1756	OD1	ASN	D	16	65.683	26.787	146.314	1.00	0.00
	ATOM 1757	ND2	ASN	D	16	65.970	28.978	145.917	1.00	0.00
20	ATOM 1758	N	LEU	D	17	61.142	28.120	148.165	1.00	0.00
	ATOM 1759	CA	LEU	D	17	60.002	27.887	149.041	1.00	0.00
	ATOM 1760	C	LEU	D	17	60.343	26.926	150.185	1.00	0.00
	ATOM 1761	O	LEU	D	17	59.671	26.940	151.212	1.00	0.00
	ATOM 1762	CB	LEU	D	17	58.831	27.325	148.221	1.00	0.00
25	ATOM 1763	CG	LEU	D	17	58.380	28.224	147.058	1.00	0.00

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	ATOM 1764	CD1	LEU	D	17	57.257	27.514	146.296	1.00	0.00
	ATOM 1765	CD2	LEU	D	17	57.869	29.587	147.544	1.00	0.00
	ATOM 1766	N	THR	D	18	61.367	26.084	150.007	1.00	0.00
	ATOM 1767	CA	THR	D	18	61.797	25.090	150.981	1.00	0.00
5	ATOM 1768	C	THR	D	18	62.332	25.752	152.249	1.00	0.00
	ATOM 1769	O	THR	D	18	61.939	25.384	153.354	1.00	0.00
	ATOM 1770	CB	THR	D	18	62.873	24.206	150.337	1.00	0.00
	ATOM 1771	OG1	THR	D	18	63.850	25.019	149.715	1.00	0.00
	ATOM 1772	CG2	THR	D	18	62.251	23.304	149.272	1.00	0.00
10	ATOM 1773	N	THR	D	19	63.244	26.714	152.082	1.00	0.00
	ATOM 1774	CA	THR	D	19	63.875	27.451	153.165	1.00	0.00
	ATOM 1775	C	THR	D	19	63.228	28.821	153.372	1.00	0.00
	ATOM 1776	O	THR	D	19	63.626	29.539	154.288	1.00	0.00
	ATOM 1777	CB	THR	D	19	65.366	27.594	152.839	1.00	0.00
15	ATOM 1778	OG1	THR	D	19	65.522	28.058	151.513	1.00	0.00
	ATOM 1779	CG2	THR	D	19	66.079	26.244	152.968	1.00	0.00
	ATOM 1780	N	SER	D	20	62.252	29.190	152.531	1.00	0.00
	ATOM 1781	CA	SER	D	20	61.555	30.464	152.595	1.00	0.00
	ATOM 1782	C	SER	D	20	62.568	31.607	152.635	1.00	0.00
20	ATOM 1783	O	SER	D	20	62.638	32.360	153.608	1.00	0.00
	ATOM 1784	CB	SER	D	20	60.594	30.475	153.789	1.00	0.00
	ATOM 1785	OG	SER	D	20	59.695	29.390	153.684	1.00	0.00
	ATOM 1786	N	SER	D	21	63.380	31.706	151.580	1.00	0.00
	ATOM 1787	CA	SER	D	21	64.469	32.662	151.524	1.00	0.00
25	ATOM 1788	C	SER	D	21	64.873	32.923	150.075	1.00	0.00

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	ATOM 1789	O	SER D	21	64.922	32.006	149.251	1.00	0.00
	ATOM 1790	CB	SER D	21	65.644	32.163	152.377	1.00	0.00
	ATOM 1791	OG	SER D	21	65.941	30.808	152.101	1.00	0.00
	ATOM 1792	N	LEU D	22	65.152	34.196	149.783	1.00	0.00
5	ATOM 1793	CA	LEU D	22	65.674	34.650	148.508	1.00	0.00
	ATOM 1794	C	LEU D	22	67.181	34.400	148.530	1.00	0.00
	ATOM 1795	O	LEU D	22	67.916	35.168	149.149	1.00	0.00
	ATOM 1796	CB	LEU D	22	65.339	36.141	148.336	1.00	0.00
	ATOM 1797	CG	LEU D	22	65.762	36.701	146.969	1.00	0.00
10	ATOM 1798	CD1	LEU D	22	64.772	36.273	145.880	1.00	0.00
	ATOM 1799	CD2	LEU D	22	65.821	38.230	147.022	1.00	0.00
	ATOM 1800	N	ILE D	23	67.639	33.321	147.885	1.00	0.00
	ATOM 1801	CA	ILE D	23	69.062	33.028	147.740	1.00	0.00
	ATOM 1802	C	ILE D	23	69.572	33.743	146.495	1.00	0.00
15	ATOM 1803	O	ILE D	23	68.997	33.579	145.421	1.00	0.00
	ATOM 1804	CB	ILE D	23	69.358	31.513	147.739	1.00	0.00
	ATOM 1805	CG1	ILE D	23	70.856	31.276	147.462	1.00	0.00
	ATOM 1806	CG2	ILE D	23	68.483	30.726	146.756	1.00	0.00
	ATOM 1807	CD1	ILE D	23	71.305	29.838	147.745	1.00	0.00
20	ATOM 1808	N	CYS D	24	70.637	34.539	146.649	1.00	0.00
	ATOM 1809	CA	CYS D	24	71.255	35.289	145.565	1.00	0.00
	ATOM 1810	C	CYS D	24	72.719	34.891	145.430	1.00	0.00
	ATOM 1811	O	CYS D	24	73.408	34.747	146.438	1.00	0.00
	ATOM 1812	CB	CYS D	24	71.128	36.787	145.829	1.00	0.00
25	ATOM 1813	SG	CYS D	24	69.450	37.467	145.878	1.00	0.00

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	ATOM 1814	N	GLN D	25	73.175	34.711	144.185	1.00	0.00
	ATOM 1815	CA	GLN D	25	74.513	34.253	143.832	1.00	0.00
	ATOM 1816	C	GLN D	25	75.135	35.217	142.824	1.00	0.00
	ATOM 1817	O	GLN D	25	74.433	35.698	141.937	1.00	0.00
5	ATOM 1818	CB	GLN D	25	74.441	32.825	143.270	1.00	0.00
	ATOM 1819	CG	GLN D	25	73.439	32.682	142.114	1.00	0.00
	ATOM 1820	CD	GLN D	25	73.544	31.324	141.430	1.00	0.00
	ATOM 1821	OE1	GLN D	25	73.865	31.244	140.248	1.00	0.00
	ATOM 1822	NE2	GLN D	25	73.272	30.247	142.167	1.00	0.00
10	ATOM 1823	N	TRP D	26	76.439	35.494	142.957	1.00	0.00
	ATOM 1824	CA	TRP D	26	77.181	36.398	142.080	1.00	0.00
	ATOM 1825	C	TRP D	26	78.517	35.777	141.675	1.00	0.00
	ATOM 1826	O	TRP D	26	78.960	34.799	142.275	1.00	0.00
	ATOM 1827	CB	TRP D	26	77.432	37.724	142.804	1.00	0.00
15	ATOM 1828	CG	TRP D	26	78.232	37.581	144.061	1.00	0.00
	ATOM 1829	CD1	TRP D	26	79.581	37.585	144.153	1.00	0.00
	ATOM 1830	CD2	TRP D	26	77.742	37.318	145.404	1.00	0.00
	ATOM 1831	NE1	TRP D	26	79.966	37.325	145.451	1.00	0.00
	ATOM 1832	CE2	TRP D	26	78.866	37.144	146.263	1.00	0.00
20	ATOM 1833	CE3	TRP D	26	76.459	37.207	145.981	1.00	0.00
	ATOM 1834	CZ2	TRP D	26	78.723	36.856	147.623	1.00	0.00
	ATOM 1835	CZ3	TRP D	26	76.307	36.971	147.357	1.00	0.00
	ATOM 1836	CH2	TRP D	26	77.436	36.786	148.172	1.00	0.00
	ATOM 1837	N	GLU D	27	79.170	36.393	140.683	1.00	0.00
25	ATOM 1838	CA	GLU D	27	80.499	36.047	140.201	1.00	0.00

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		ATOM 1839	C	GLU	D	27	81.492	37.111	140.688	1.00	0.00
		ATOM 1840	O	GLU	D	27	81.333	38.279	140.333	1.00	0.00
		ATOM 1841	CB	GLU	D	27	80.467	35.974	138.666	1.00	0.00
		ATOM 1842	CG	GLU	D	27	81.853	35.846	138.013	1.00	0.00
5		ATOM 1843	CD	GLU	D	27	82.648	34.625	138.468	1.00	0.00
		ATOM 1844	OE1	GLU	D	27	82.007	33.631	138.872	1.00	0.00
		ATOM 1845	OE2	GLU	D	27	83.892	34.711	138.402	1.00	0.00
		ATOM 1846	N	PRO	D	28	82.501	36.741	141.497	1.00	0.00
		ATOM 1847	CA	PRO	D	28	83.460	37.680	142.056	1.00	0.00
10		ATOM 1848	C	PRO	D	28	84.555	38.046	141.047	1.00	0.00
		ATOM 1849	O	PRO	D	28	84.685	39.213	140.680	1.00	0.00
		ATOM 1850	CB	PRO	D	28	84.016	36.984	143.300	1.00	0.00
		ATOM 1851	CG	PRO	D	28	83.892	35.491	142.999	1.00	0.00
		ATOM 1852	CD	PRO	D	28	82.691	35.409	142.056	1.00	0.00
15		ATOM 1853	N	GLY	D	29	85.352	37.061	140.614	1.00	0.00
		ATOM 1854	CA	GLY	D	29	86.462	37.246	139.692	1.00	0.00
		ATOM 1855	C	GLY	D	29	87.807	37.354	140.431	1.00	0.00
		ATOM 1856	O	GLY	D	29	87.966	36.731	141.479	1.00	0.00
		ATOM 1857	N	PRO	D	30	88.775	38.110	139.877	1.00	0.00
20		ATOM 1858	CA	PRO	D	30	90.162	38.250	140.320	1.00	0.00
		ATOM 1859	C	PRO	D	30	90.456	38.024	141.810	1.00	0.00
		ATOM 1860	O	PRO	D	30	90.390	38.960	142.605	1.00	0.00
		ATOM 1861	CB	PRO	D	30	90.554	39.658	139.867	1.00	0.00
		ATOM 1862	CG	PRO	D	30	89.848	39.771	138.518	1.00	0.00
25		ATOM 1863	CD	PRO	D	30	88.562	38.969	138.718	1.00	0.00

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		ATOM 1864	N	GLU	D	31	90.844	36.793	142.172	1.00	0.00
		ATOM 1865	CA	GLU	D	31	91.284	36.435	143.518	1.00	0.00
		ATOM 1866	C	GLU	D	31	92.464	37.319	143.940	1.00	0.00
		ATOM 1867	O	GLU	D	31	93.268	37.728	143.102	1.00	0.00
5		ATOM 1868	CB	GLU	D	31	91.699	34.953	143.525	1.00	0.00
		ATOM 1869	CG	GLU	D	31	91.976	34.355	144.917	1.00	0.00
		ATOM 1870	CD	GLU	D	31	90.709	33.907	145.640	1.00	0.00
		ATOM 1871	OE1	GLU	D	31	89.975	33.095	145.037	1.00	0.00
		ATOM 1872	OE2	GLU	D	31	90.509	34.357	146.789	1.00	0.00
10		ATOM 1873	N	THR	D	32	92.583	37.584	145.244	1.00	0.00
		ATOM 1874	CA	THR	D	32	93.702	38.295	145.844	1.00	0.00
		ATOM 1875	C	THR	D	32	93.979	37.724	147.231	1.00	0.00
		ATOM 1876	O	THR	D	32	93.123	37.059	147.810	1.00	0.00
		ATOM 1877	CB	THR	D	32	93.410	39.803	145.919	1.00	0.00
15		ATOM 1878	OG1	THR	D	32	92.032	40.074	146.083	1.00	0.00
		ATOM 1879	CG2	THR	D	32	93.896	40.498	144.655	1.00	0.00
		ATOM 1880	N	HIS	D	33	95.174	37.997	147.773	1.00	0.00
		ATOM 1881	CA	HIS	D	33	95.573	37.513	149.092	1.00	0.00
		ATOM 1882	C	HIS	D	33	95.251	38.537	150.193	1.00	0.00
20		ATOM 1883	O	HIS	D	33	95.906	38.564	151.234	1.00	0.00
		ATOM 1884	CB	HIS	D	33	97.047	37.066	149.059	1.00	0.00
		ATOM 1885	CG	HIS	D	33	98.070	38.104	149.453	1.00	0.00
		ATOM 1886	ND1	HIS	D	33	98.005	39.433	149.058	1.00	0.00
		ATOM 1887	CD2	HIS	D	33	99.144	38.033	150.307	1.00	0.00
25		ATOM 1888	CE1	HIS	D	33	99.000	40.083	149.685	1.00	0.00

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	ATOM 1889	NE2	HIS	D	33	99.737	39.282	150.456	1.00	0.00
	ATOM 1890	N	LEU	D	34	94.246	39.391	149.964	1.00	0.00
	ATOM 1891	CA	LEU	D	34	93.834	40.437	150.889	1.00	0.00
	ATOM 1892	C	LEU	D	34	92.487	40.044	151.500	1.00	0.00
5	ATOM 1893	O	LEU	D	34	91.618	39.585	150.760	1.00	0.00
	ATOM 1894	CB	LEU	D	34	93.669	41.760	150.134	1.00	0.00
	ATOM 1895	CG	LEU	D	34	94.951	42.285	149.472	1.00	0.00
	ATOM 1896	CD1	LEU	D	34	94.573	43.430	148.526	1.00	0.00
	ATOM 1897	CD2	LEU	D	34	95.962	42.792	150.508	1.00	0.00
10	ATOM 1898	N	PRO	D	35	92.278	40.237	152.814	1.00	0.00
	ATOM 1899	CA	PRO	D	35	90.982	40.062	153.455	1.00	0.00
	ATOM 1900	C	PRO	D	35	89.896	40.911	152.780	1.00	0.00
	ATOM 1901	O	PRO	D	35	89.788	42.106	153.047	1.00	0.00
	ATOM 1902	CB	PRO	D	35	91.186	40.456	154.925	1.00	0.00
15	ATOM 1903	CG	PRO	D	35	92.679	40.239	155.154	1.00	0.00
	ATOM 1904	CD	PRO	D	35	93.290	40.586	153.799	1.00	0.00
	ATOM 1905	N	THR	D	36	89.095	40.293	151.906	1.00	0.00
	ATOM 1906	CA	THR	D	36	87.960	40.920	151.237	1.00	0.00
	ATOM 1907	C	THR	D	36	86.655	40.350	151.808	1.00	0.00
20	ATOM 1908	O	THR	D	36	86.685	39.456	152.654	1.00	0.00
	ATOM 1909	CB	THR	D	36	88.113	40.783	149.709	1.00	0.00
	ATOM 1910	OG1	THR	D	36	87.010	41.355	149.034	1.00	0.00
	ATOM 1911	CG2	THR	D	36	88.297	39.338	149.235	1.00	0.00
	ATOM 1912	N	SER	D	37	85.507	40.888	151.383	1.00	0.00
25	ATOM 1913	CA	SER	D	37	84.194	40.506	151.885	1.00	0.00

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	ATOM 1914	C	SER D	37	83.116	41.006	150.923	1.00	0.00
	ATOM 1915	O	SER D	37	83.248	42.098	150.374	1.00	0.00
	ATOM 1916	CB	SER D	37	83.981	41.095	153.286	1.00	0.00
	ATOM 1917	OG	SER D	37	83.924	42.505	153.218	1.00	0.00
5	ATOM 1918	N	PHE D	38	82.056	40.216	150.712	1.00	0.00
	ATOM 1919	CA	PHE D	38	80.993	40.538	149.764	1.00	0.00
	ATOM 1920	C	PHE D	38	79.683	40.791	150.497	1.00	0.00
	ATOM 1921	O	PHE D	38	79.006	39.833	150.823	1.00	0.00
	ATOM 1922	CB	PHE D	38	80.807	39.382	148.778	1.00	0.00
10	ATOM 1923	CG	PHE D	38	81.977	39.175	147.848	1.00	0.00
	ATOM 1924	CD1	PHE D	38	81.988	39.781	146.578	1.00	0.00
	ATOM 1925	CD2	PHE D	38	83.077	38.409	148.271	1.00	0.00
	ATOM 1926	CE1	PHE D	38	83.102	39.622	145.737	1.00	0.00
	ATOM 1927	CE2	PHE D	38	84.203	38.279	147.443	1.00	0.00
15	ATOM 1928	CZ	PHE D	38	84.221	38.898	146.182	1.00	0.00
	ATOM 1929	N	THR D	39	79.279	42.041	150.727	1.00	0.00
	ATOM 1930	CA	THR D	39	78.005	42.329	151.376	1.00	0.00
	ATOM 1931	C	THR D	39	76.876	42.357	150.334	1.00	0.00
	ATOM 1932	O	THR D	39	76.855	43.229	149.467	1.00	0.00
20	ATOM 1933	CB	THR D	39	78.115	43.632	152.186	1.00	0.00
	ATOM 1934	OG1	THR D	39	78.530	44.709	151.374	1.00	0.00
	ATOM 1935	CG2	THR D	39	79.139	43.478	153.316	1.00	0.00
	ATOM 1936	N	LEU D	40	75.933	41.405	150.415	1.00	0.00
	ATOM 1937	CA	LEU D	40	74.696	41.434	149.642	1.00	0.00
25	ATOM 1938	C	LEU D	40	73.769	42.455	150.302	1.00	0.00

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	ATOM 1939	O	LEU	D	40	73.234	42.201	151.381	1.00	0.00
	ATOM 1940	CB	LEU	D	40	74.079	40.027	149.565	1.00	0.00
	ATOM 1941	CG	LEU	D	40	72.670	39.989	148.938	1.00	0.00
	ATOM 1942	CD1	LEU	D	40	72.710	40.427	147.472	1.00	0.00
5	ATOM 1943	CD2	LEU	D	40	72.079	38.579	149.012	1.00	0.00
	ATOM 1944	N	LYS	D	41	73.618	43.618	149.664	1.00	0.00
	ATOM 1945	CA	LYS	D	41	72.831	44.742	150.144	1.00	0.00
	ATOM 1946	C	LYS	D	41	71.524	44.863	149.363	1.00	0.00
	ATOM 1947	O	LYS	D	41	71.438	44.443	148.208	1.00	0.00
10	ATOM 1948	CB	LYS	D	41	73.632	46.032	149.966	1.00	0.00
	ATOM 1949	CG	LYS	D	41	74.866	46.103	150.871	1.00	0.00
	ATOM 1950	CD	LYS	D	41	75.046	47.555	151.325	1.00	0.00
	ATOM 1951	CE	LYS	D	41	76.228	47.714	152.285	1.00	0.00
	ATOM 1952	NZ	LYS	D	41	75.913	48.677	153.353	1.00	0.00
15	ATOM 1953	N	SER	D	42	70.510	45.468	149.991	1.00	0.00
	ATOM 1954	CA	SER	D	42	69.192	45.604	149.394	1.00	0.00
	ATOM 1955	C	SER	D	42	68.346	46.661	150.110	1.00	0.00
	ATOM 1956	O	SER	D	42	68.586	46.976	151.276	1.00	0.00
	ATOM 1957	CB	SER	D	42	68.499	44.233	149.386	1.00	0.00
20	ATOM 1958	OG	SER	D	42	68.693	43.569	150.620	1.00	0.00
	ATOM 1959	N	PHE	D	43	67.338	47.198	149.406	1.00	0.00
	ATOM 1960	CA	PHE	D	43	66.334	48.088	149.982	1.00	0.00
	ATOM 1961	C	PHE	D	43	64.947	47.799	149.391	1.00	0.00
	ATOM 1962	O	PHE	D	43	64.818	47.536	148.194	1.00	0.00
25	ATOM 1963	CB	PHE	D	43	66.751	49.569	149.865	1.00	0.00

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		ATOM 1964	CG	PHE	D	43	66.853	50.156	148.463	1.00	0.00
		ATOM 1965	CD1	PHE	D	43	65.687	50.491	147.751	1.00	0.00
		ATOM 1966	CD2	PHE	D	43	68.102	50.532	147.937	1.00	0.00
		ATOM 1967	CE1	PHE	D	43	65.773	51.077	146.477	1.00	0.00
5		ATOM 1968	CE2	PHE	D	43	68.194	51.111	146.659	1.00	0.00
		ATOM 1969	CZ	PHE	D	43	67.027	51.377	145.924	1.00	0.00
		ATOM 1970	N	LYS	D	44	63.912	47.844	150.244	1.00	0.00
		ATOM 1971	CA	LYS	D	44	62.502	47.713	149.881	1.00	0.00
		ATOM 1972	C	LYS	D	44	62.146	48.881	148.960	1.00	0.00
10		ATOM 1973	O	LYS	D	44	62.557	50.008	149.231	1.00	0.00
		ATOM 1974	CB	LYS	D	44	61.604	47.751	151.138	1.00	0.00
		ATOM 1975	CG	LYS	D	44	61.998	46.744	152.230	1.00	0.00
		ATOM 1976	CD	LYS	D	44	61.129	46.873	153.495	1.00	0.00
		ATOM 1977	CE	LYS	D	44	61.848	46.281	154.724	1.00	0.00
15		ATOM 1978	NZ	LYS	D	44	61.415	46.889	156.002	1.00	0.00
		ATOM 1979	N	SER	D	45	61.417	48.632	147.867	1.00	0.00
		ATOM 1980	CA	SER	D	45	61.186	49.640	146.842	1.00	0.00
		ATOM 1981	C	SER	D	45	59.817	49.459	146.186	1.00	0.00
		ATOM 1982	O	SER	D	45	58.956	48.738	146.692	1.00	0.00
20		ATOM 1983	CB	SER	D	45	62.331	49.564	145.821	1.00	0.00
		ATOM 1984	OG	SER	D	45	62.316	50.671	144.944	1.00	0.00
		ATOM 1985	N	ARG	D	46	59.626	50.143	145.056	1.00	0.00
		ATOM 1986	CA	ARG	D	46	58.423	50.128	144.245	1.00	0.00
		ATOM 1987	C	ARG	D	46	58.844	50.038	142.770	1.00	0.00
25		ATOM 1988	O	ARG	D	46	59.934	49.551	142.470	1.00	0.00

FOOTNOTES

		ATOM 1989	CB	ARG	D	46	57.584	51.377	144.577	1.00	0.00
		ATOM 1990	CG	ARG	D	46	56.062	51.179	144.469	1.00	0.00
		ATOM 1991	CD	ARG	D	46	55.409	50.779	145.803	1.00	0.00
		ATOM 1992	NE	ARG	D	46	53.969	51.089	145.797	1.00	0.00
5		ATOM 1993	CZ	ARG	D	46	53.437	52.281	146.125	1.00	0.00
		ATOM 1994	NH1	ARG	D	46	54.218	53.285	146.549	1.00	0.00
		ATOM 1995	NH2	ARG	D	46	52.116	52.474	146.021	1.00	0.00
		ATOM 1996	N	GLY	D	47	57.987	50.516	141.858	1.00	0.00
		ATOM 1997	CA	GLY	D	47	58.145	50.402	140.414	1.00	0.00
10		ATOM 1998	C	GLY	D	47	59.516	50.852	139.900	1.00	0.00
		ATOM 1999	O	GLY	D	47	60.032	51.896	140.304	1.00	0.00
		ATOM 2000	N	ASN	D	48	60.098	50.035	139.010	1.00	0.00
		ATOM 2001	CA	ASN	D	48	61.390	50.244	138.354	1.00	0.00
		ATOM 2002	C	ASN	D	48	62.541	50.465	139.346	1.00	0.00
15		ATOM 2003	O	ASN	D	48	63.599	50.965	138.975	1.00	0.00
		ATOM 2004	CB	ASN	D	48	61.274	51.391	137.335	1.00	0.00
		ATOM 2005	CG	ASN	D	48	62.453	51.442	136.363	1.00	0.00
		ATOM 2006	OD1	ASN	D	48	62.988	50.410	135.967	1.00	0.00
		ATOM 2007	ND2	ASN	D	48	62.859	52.646	135.960	1.00	0.00
20		ATOM 2008	N	CYS	D	49	62.328	50.107	140.616	1.00	0.00
		ATOM 2009	CA	CYS	D	49	63.220	50.374	141.730	1.00	0.00
		ATOM 2010	C	CYS	D	49	63.674	51.832	141.816	1.00	0.00
		ATOM 2011	O	CYS	D	49	64.781	52.116	142.269	1.00	0.00
		ATOM 2012	CB	CYS	D	49	64.365	49.361	141.805	1.00	0.00
25		ATOM 2013	SG	CYS	D	49	63.806	47.706	142.265	1.00	0.00

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		ATOM 2014	N	GLN	D	50	62.783	52.761	141.453	1.00	0.00
		ATOM 2015	CA	GLN	D	50	62.967	54.186	141.675	1.00	0.00
		ATOM 2016	C	GLN	D	50	62.035	54.578	142.822	1.00	0.00
		ATOM 2017	O	GLN	D	50	61.017	55.224	142.599	1.00	0.00
5		ATOM 2018	CB	GLN	D	50	62.658	54.953	140.382	1.00	0.00
		ATOM 2019	CG	GLN	D	50	63.661	54.608	139.268	1.00	0.00
		ATOM 2020	CD	GLN	D	50	63.322	55.243	137.919	1.00	0.00
		ATOM 2021	OE1	GLN	D	50	64.216	55.563	137.141	1.00	0.00
		ATOM 2022	NE2	GLN	D	50	62.036	55.408	137.603	1.00	0.00
10		ATOM 2023	N	THR	D	51	62.376	54.145	144.040	1.00	0.00
		ATOM 2024	CA	THR	D	51	61.740	54.494	145.310	1.00	0.00
		ATOM 2025	C	THR	D	51	62.681	53.965	146.392	1.00	0.00
		ATOM 2026	O	THR	D	51	62.609	52.785	146.728	1.00	0.00
		ATOM 2027	CB	THR	D	51	60.338	53.856	145.462	1.00	0.00
15		ATOM 2028	OG1	THR	D	51	59.389	54.428	144.589	1.00	0.00
		ATOM 2029	CG2	THR	D	51	59.766	54.046	146.874	1.00	0.00
		ATOM 2030	N	GLN	D	52	63.587	54.794	146.927	1.00	0.00
		ATOM 2031	CA	GLN	D	52	64.515	54.290	147.929	1.00	0.00
		ATOM 2032	C	GLN	D	52	63.795	54.173	149.271	1.00	0.00
20		ATOM 2033	O	GLN	D	52	63.724	55.132	150.036	1.00	0.00
		ATOM 2034	CB	GLN	D	52	65.823	55.089	147.963	1.00	0.00
		ATOM 2035	CG	GLN	D	52	66.900	54.301	148.739	1.00	0.00
		ATOM 2036	CD	GLN	D	52	68.318	54.481	148.197	1.00	0.00
		ATOM 2037	OE1	GLN	D	52	68.524	54.847	147.043	1.00	0.00
25		ATOM 2038	NE2	GLN	D	52	69.319	54.197	149.030	1.00	0.00

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		ATOM	2039	N	GLY	D	53	63.223	52.991	149.518	1.00	0.00
		ATOM	2040	CA	GLY	D	53	62.501	52.682	150.735	1.00	0.00
		ATOM	2041	C	GLY	D	53	63.432	52.058	151.768	1.00	0.00
		ATOM	2042	O	GLY	D	53	64.622	52.366	151.824	1.00	0.00
5		ATOM	2043	N	ASP	D	54	62.861	51.200	152.612	1.00	0.00
		ATOM	2044	CA	ASP	D	54	63.501	50.724	153.825	1.00	0.00
		ATOM	2045	C	ASP	D	54	64.736	49.875	153.513	1.00	0.00
		ATOM	2046	O	ASP	D	54	64.653	48.932	152.729	1.00	0.00
		ATOM	2047	CB	ASP	D	54	62.475	49.905	154.617	1.00	0.00
10		ATOM	2048	CG	ASP	D	54	62.440	50.235	156.097	1.00	0.00
		ATOM	2049	OD1	ASP	D	54	62.168	51.412	156.410	1.00	0.00
		ATOM	2050	OD2	ASP	D	54	62.609	49.273	156.876	1.00	0.00
		ATOM	2051	N	SER	D	55	65.871	50.178	154.147	1.00	0.00
		ATOM	2052	CA	SER	D	55	67.077	49.371	154.027	1.00	0.00
15		ATOM	2053	C	SER	D	55	66.826	47.975	154.603	1.00	0.00
		ATOM	2054	O	SER	D	55	66.492	47.845	155.779	1.00	0.00
		ATOM	2055	CB	SER	D	55	68.235	50.057	154.758	1.00	0.00
		ATOM	2056	OG	SER	D	55	68.423	51.362	154.249	1.00	0.00
		ATOM	2057	N	ILE	D	56	66.992	46.934	153.782	1.00	0.00
20		ATOM	2058	CA	ILE	D	56	66.928	45.550	154.230	1.00	0.00
		ATOM	2059	C	ILE	D	56	68.279	45.226	154.862	1.00	0.00
		ATOM	2060	O	ILE	D	56	69.313	45.596	154.311	1.00	0.00
		ATOM	2061	CB	ILE	D	56	66.601	44.637	153.033	1.00	0.00
		ATOM	2062	CG1	ILE	D	56	65.140	44.863	152.607	1.00	0.00
25		ATOM	2063	CG2	ILE	D	56	66.864	43.162	153.369	1.00	0.00

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		ATOM 2064	CD1	ILE	D	56	64.842	44.387	151.182	1.00	0.00
		ATOM 2065	N	LEU	D	57	68.273	44.561	156.024	1.00	0.00
		ATOM 2066	CA	LEU	D	57	69.489	44.210	156.746	1.00	0.00
		ATOM 2067	C	LEU	D	57	70.431	43.422	155.832	1.00	0.00
5		ATOM 2068	O	LEU	D	57	70.040	42.388	155.289	1.00	0.00
		ATOM 2069	CB	LEU	D	57	69.116	43.419	158.008	1.00	0.00
		ATOM 2070	CG	LEU	D	57	70.322	42.887	158.803	1.00	0.00
		ATOM 2071	CD1	LEU	D	57	71.219	44.019	159.315	1.00	0.00
		ATOM 2072	CD2	LEU	D	57	69.813	42.066	159.994	1.00	0.00
10		ATOM 2073	N	ASP	D	58	71.656	43.934	155.661	1.00	0.00
		ATOM 2074	CA	ASP	D	58	72.663	43.386	154.765	1.00	0.00
		ATOM 2075	C	ASP	D	58	72.932	41.917	155.096	1.00	0.00
		ATOM 2076	O	ASP	D	58	72.946	41.528	156.264	1.00	0.00
		ATOM 2077	CB	ASP	D	58	73.962	44.212	154.854	1.00	0.00
15		ATOM 2078	CG	ASP	D	58	73.814	45.664	154.390	1.00	0.00
		ATOM 2079	OD1	ASP	D	58	72.815	45.956	153.701	1.00	0.00
		ATOM 2080	OD2	ASP	D	58	74.720	46.472	154.701	1.00	0.00
		ATOM 2081	N	CYS	D	59	73.154	41.107	154.058	1.00	0.00
		ATOM 2082	CA	CYS	D	59	73.542	39.713	154.184	1.00	0.00
20		ATOM 2083	C	CYS	D	59	75.038	39.640	153.899	1.00	0.00
		ATOM 2084	O	CYS	D	59	75.463	39.849	152.763	1.00	0.00
		ATOM 2085	CB	CYS	D	59	72.687	38.852	153.240	1.00	0.00
		ATOM 2086	SG	CYS	D	59	72.894	37.051	153.351	1.00	0.00
		ATOM 2087	N	VAL	D	60	75.842	39.375	154.937	1.00	0.00
25		ATOM 2088	CA	VAL	D	60	77.254	39.072	154.767	1.00	0.00

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	ATOM 2089	C	VAL	D	60	77.338	37.553	154.586	1.00	0.00
	ATOM 2090	O	VAL	D	60	76.865	36.809	155.441	1.00	0.00
	ATOM 2091	CB	VAL	D	60	78.125	39.610	155.926	1.00	0.00
	ATOM 2092	CG1	VAL	D	60	77.650	40.995	156.383	1.00	0.00
5	ATOM 2093	CG2	VAL	D	60	78.224	38.688	157.147	1.00	0.00
	ATOM 2094	N	PRO	D	61	77.861	37.052	153.467	1.00	0.00
	ATOM 2095	CA	PRO	D	61	77.947	35.641	153.197	1.00	0.00
	ATOM 2096	C	PRO	D	61	79.070	35.069	154.029	1.00	0.00
	ATOM 2097	O	PRO	D	61	79.783	35.771	154.748	1.00	0.00
10	ATOM 2098	CB	PRO	D	61	78.280	35.533	151.712	1.00	0.00
	ATOM 2099	CG	PRO	D	61	79.154	36.764	151.507	1.00	0.00
	ATOM 2100	CD	PRO	D	61	78.462	37.791	152.399	1.00	0.00
	ATOM 2101	N	LYS	D	62	79.233	33.767	153.879	1.00	0.00
	ATOM 2102	CA	LYS	D	62	80.322	33.077	154.506	1.00	0.00
15	ATOM 2103	C	LYS	D	62	81.609	33.329	153.718	1.00	0.00
	ATOM 2104	O	LYS	D	62	81.573	33.628	152.523	1.00	0.00
	ATOM 2105	CB	LYS	D	62	79.935	31.608	154.599	1.00	0.00
	ATOM 2106	CG	LYS	D	62	80.933	30.863	155.477	1.00	0.00
	ATOM 2107	CD	LYS	D	62	80.413	29.454	155.731	1.00	0.00
20	ATOM 2108	CE	LYS	D	62	81.448	28.704	156.568	1.00	0.00
	ATOM 2109	NZ	LYS	D	62	81.017	27.323	156.831	1.00	0.00
	ATOM 2110	N	ASP	D	63	82.736	33.197	154.427	1.00	0.00
	ATOM 2111	CA	ASP	D	63	84.108	33.412	153.988	1.00	0.00
	ATOM 2112	C	ASP	D	63	84.336	32.943	152.552	1.00	0.00
25	ATOM 2113	O	ASP	D	63	84.800	33.712	151.712	1.00	0.00

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		ATOM 2114	CB	ASP	D	63	85.064	32.669	154.940	1.00	0.00
		ATOM 2115	CG	ASP	D	63	84.784	32.950	156.414	1.00	0.00
		ATOM 2116	OD1	ASP	D	63	83.724	32.471	156.879	1.00	0.00
		ATOM 2117	OD2	ASP	D	63	85.625	33.626	157.042	1.00	0.00
5		ATOM 2118	N	GLY	D	64	84.019	31.669	152.292	1.00	0.00
		ATOM 2119	CA	GLY	D	64	84.259	31.012	151.019	1.00	0.00
		ATOM 2120	C	GLY	D	64	82.968	30.495	150.391	1.00	0.00
		ATOM 2121	O	GLY	D	64	82.945	29.364	149.909	1.00	0.00
		ATOM 2122	N	GLN	D	65	81.911	31.318	150.365	1.00	0.00
10		ATOM 2123	CA	GLN	D	65	80.761	31.125	149.486	1.00	0.00
		ATOM 2124	C	GLN	D	65	80.444	32.448	148.786	1.00	0.00
		ATOM 2125	O	GLN	D	65	80.504	33.505	149.410	1.00	0.00
		ATOM 2126	CB	GLN	D	65	79.536	30.623	150.266	1.00	0.00
		ATOM 2127	CG	GLN	D	65	79.607	29.137	150.640	1.00	0.00
15		ATOM 2128	CD	GLN	D	65	79.639	28.219	149.415	1.00	0.00
		ATOM 2129	OE1	GLN	D	65	78.605	27.918	148.827	1.00	0.00
		ATOM 2130	NE2	GLN	D	65	80.824	27.759	149.021	1.00	0.00
		ATOM 2131	N	SER	D	66	80.099	32.377	147.492	1.00	0.00
		ATOM 2132	CA	SER	D	66	79.768	33.528	146.655	1.00	0.00
20		ATOM 2133	C	SER	D	66	78.251	33.650	146.477	1.00	0.00
		ATOM 2134	O	SER	D	66	77.777	33.996	145.394	1.00	0.00
		ATOM 2135	CB	SER	D	66	80.478	33.399	145.301	1.00	0.00
		ATOM 2136	OG	SER	D	66	81.868	33.233	145.496	1.00	0.00
		ATOM 2137	N	HIS	D	67	77.494	33.367	147.544	1.00	0.00
25		ATOM 2138	CA	HIS	D	67	76.049	33.516	147.579	1.00	0.00

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	ATOM 2139	C	HIS	D	67	75.628	33.904	148.995	1.00	0.00
	ATOM 2140	O	HIS	D	67	76.368	33.649	149.944	1.00	0.00
	ATOM 2141	CB	HIS	D	67	75.354	32.225	147.118	1.00	0.00
	ATOM 2142	CG	HIS	D	67	75.361	31.127	148.149	1.00	0.00
5	ATOM 2143	ND1	HIS	D	67	74.406	31.046	149.155	1.00	0.00
	ATOM 2144	CD2	HIS	D	67	76.205	30.065	148.364	1.00	0.00
	ATOM 2145	CE1	HIS	D	67	74.718	29.986	149.917	1.00	0.00
	ATOM 2146	NE2	HIS	D	67	75.807	29.344	149.488	1.00	0.00
	ATOM 2147	N	CYS	D	68	74.441	34.501	149.138	1.00	0.00
10	ATOM 2148	CA	CYS	D	68	73.906	34.928	150.424	1.00	0.00
	ATOM 2149	C	CYS	D	68	72.382	34.870	150.369	1.00	0.00
	ATOM 2150	O	CYS	D	68	71.794	35.094	149.310	1.00	0.00
	ATOM 2151	CB	CYS	D	68	74.431	36.327	150.774	1.00	0.00
	ATOM 2152	SG	CYS	D	68	74.733	36.641	152.527	1.00	0.00
15	ATOM 2153	N	CYS	D	69	71.757	34.510	151.493	1.00	0.00
	ATOM 2154	CA	CYS	D	69	70.343	34.175	151.578	1.00	0.00
	ATOM 2155	C	CYS	D	69	69.612	35.218	152.412	1.00	0.00
	ATOM 2156	O	CYS	D	69	69.818	35.278	153.624	1.00	0.00
	ATOM 2157	CB	CYS	D	69	70.185	32.781	152.199	1.00	0.00
20	ATOM 2158	SG	CYS	D	69	70.956	31.532	151.137	1.00	0.00
	ATOM 2159	N	ILE	D	70	68.739	36.018	151.787	1.00	0.00
	ATOM 2160	CA	ILE	D	70	67.875	36.925	152.530	1.00	0.00
	ATOM 2161	C	ILE	D	70	66.694	36.107	153.070	1.00	0.00
	ATOM 2162	O	ILE	D	70	65.976	35.490	152.280	1.00	0.00
25	ATOM 2163	CB	ILE	D	70	67.381	38.103	151.673	1.00	0.00

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	ATOM 2164	CG1	ILE	D	70	68.538	38.805	150.943	1.00	0.00
	ATOM 2165	CG2	ILE	D	70	66.646	39.093	152.593	1.00	0.00
	ATOM 2166	CD1	ILE	D	70	68.061	40.006	150.120	1.00	0.00
	ATOM 2167	N	PRO	D	71	66.472	36.082	154.394	1.00	0.00
5	ATOM 2168	CA	PRO	D	71	65.383	35.339	155.007	1.00	0.00
	ATOM 2169	C	PRO	D	71	64.059	36.064	154.756	1.00	0.00
	ATOM 2170	O	PRO	D	71	64.029	37.296	154.758	1.00	0.00
	ATOM 2171	CB	PRO	D	71	65.730	35.306	156.496	1.00	0.00
	ATOM 2172	CG	PRO	D	71	66.463	36.633	156.707	1.00	0.00
10	ATOM 2173	CD	PRO	D	71	67.239	36.796	155.403	1.00	0.00
	ATOM 2174	N	ARG	D	72	62.956	35.325	154.557	1.00	0.00
	ATOM 2175	CA	ARG	D	72	61.694	35.965	154.197	1.00	0.00
	ATOM 2176	C	ARG	D	72	61.175	36.946	155.247	1.00	0.00
	ATOM 2177	O	ARG	D	72	60.312	37.761	154.925	1.00	0.00
15	ATOM 2178	CB	ARG	D	72	60.616	34.968	153.750	1.00	0.00
	ATOM 2179	CG	ARG	D	72	59.705	34.447	154.876	1.00	0.00
	ATOM 2180	CD	ARG	D	72	58.232	34.735	154.563	1.00	0.00
	ATOM 2181	NE	ARG	D	72	57.955	36.170	154.370	1.00	0.00
	ATOM 2182	CZ	ARG	D	72	56.738	36.652	154.067	1.00	0.00
20	ATOM 2183	NH1	ARG	D	72	55.691	35.818	153.991	1.00	0.00
	ATOM 2184	NH2	ARG	D	72	56.569	37.961	153.838	1.00	0.00
	ATOM 2185	N	LYS	D	73	61.676	36.868	156.490	1.00	0.00
	ATOM 2186	CA	LYS	D	73	61.317	37.813	157.535	1.00	0.00
	ATOM 2187	C	LYS	D	73	61.625	39.257	157.115	1.00	0.00
25	ATOM 2188	O	LYS	D	73	60.914	40.171	157.520	1.00	0.00

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		ATOM 2189	CB	LYS	D	73	61.939	37.425	158.891	1.00	0.00
		ATOM 2190	CG	LYS	D	73	63.449	37.678	159.028	1.00	0.00
		ATOM 2191	CD	LYS	D	73	63.928	37.478	160.478	1.00	0.00
		ATOM 2192	CE	LYS	D	73	64.497	36.080	160.756	1.00	0.00
5		ATOM 2193	NZ	LYS	D	73	65.927	35.987	160.401	1.00	0.00
		ATOM 2194	N	HIS	D	74	62.662	39.472	156.293	1.00	0.00
		ATOM 2195	CA	HIS	D	74	62.995	40.797	155.782	1.00	0.00
		ATOM 2196	C	HIS	D	74	62.092	41.202	154.613	1.00	0.00
		ATOM 2197	O	HIS	D	74	61.793	42.383	154.445	1.00	0.00
10		ATOM 2198	CB	HIS	D	74	64.453	40.829	155.311	1.00	0.00
		ATOM 2199	CG	HIS	D	74	65.486	40.586	156.383	1.00	0.00
		ATOM 2200	ND1	HIS	D	74	66.820	40.356	156.083	1.00	0.00
		ATOM 2201	CD2	HIS	D	74	65.423	40.569	157.756	1.00	0.00
		ATOM 2202	CE1	HIS	D	74	67.456	40.115	157.241	1.00	0.00
15		ATOM 2203	NE2	HIS	D	74	66.655	40.225	158.303	1.00	0.00
		ATOM 2204	N	LEU	D	75	61.724	40.239	153.762	1.00	0.00
		ATOM 2205	CA	LEU	D	75	61.170	40.517	152.444	1.00	0.00
		ATOM 2206	C	LEU	D	75	59.699	40.932	152.531	1.00	0.00
		ATOM 2207	O	LEU	D	75	58.905	40.277	153.208	1.00	0.00
20		ATOM 2208	CB	LEU	D	75	61.262	39.275	151.541	1.00	0.00
		ATOM 2209	CG	LEU	D	75	62.622	38.562	151.470	1.00	0.00
		ATOM 2210	CD1	LEU	D	75	62.453	37.257	150.681	1.00	0.00
		ATOM 2211	CD2	LEU	D	75	63.715	39.381	150.784	1.00	0.00
		ATOM 2212	N	LEU	D	76	59.326	41.963	151.763	1.00	0.00
25		ATOM 2213	CA	LEU	D	76	57.946	42.209	151.363	1.00	0.00

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	ATOM 2214	C	LEU D	76	57.732	41.428	150.066	1.00	0.00
	ATOM 2215	O	LEU D	76	58.545	41.550	149.152	1.00	0.00
	ATOM 2216	CB	LEU D	76	57.733	43.714	151.156	1.00	0.00
	ATOM 2217	CG	LEU D	76	56.345	44.067	150.596	1.00	0.00
5	ATOM 2218	CD1	LEU D	76	55.206	43.683	151.546	1.00	0.00
	ATOM 2219	CD2	LEU D	76	56.285	45.575	150.323	1.00	0.00
	ATOM 2220	N	LEU D	77	56.689	40.589	149.997	1.00	0.00
	ATOM 2221	CA	LEU D	77	56.636	39.539	148.986	1.00	0.00
	ATOM 2222	C	LEU D	77	55.940	39.855	147.669	1.00	0.00
10	ATOM 2223	O	LEU D	77	56.273	39.180	146.712	1.00	0.00
	ATOM 2224	CB	LEU D	77	56.118	38.214	149.556	1.00	0.00
	ATOM 2225	CG	LEU D	77	57.161	37.445	150.384	1.00	0.00
	ATOM 2226	CD1	LEU D	77	56.587	36.055	150.682	1.00	0.00
	ATOM 2227	CD2	LEU D	77	58.510	37.254	149.676	1.00	0.00
15	ATOM 2228	N	TYR D	78	54.992	40.787	147.549	1.00	0.00
	ATOM 2229	CA	TYR D	78	54.434	41.077	146.222	1.00	0.00
	ATOM 2230	C	TYR D	78	54.717	42.528	145.866	1.00	0.00
	ATOM 2231	O	TYR D	78	53.818	43.288	145.511	1.00	0.00
	ATOM 2232	CB	TYR D	78	52.967	40.645	146.122	1.00	0.00
20	ATOM 2233	CG	TYR D	78	52.790	39.134	146.081	1.00	0.00
	ATOM 2234	CD1	TYR D	78	52.856	38.383	147.269	1.00	0.00
	ATOM 2235	CD2	TYR D	78	52.586	38.473	144.853	1.00	0.00
	ATOM 2236	CE1	TYR D	78	52.681	36.989	147.237	1.00	0.00
	ATOM 2237	CE2	TYR D	78	52.400	37.079	144.821	1.00	0.00
25	ATOM 2238	CZ	TYR D	78	52.441	36.339	146.015	1.00	0.00

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	ATOM 2239	OH	TYR	D	78	52.242	34.990	145.995	1.00	0.00
	ATOM 2240	N	GLN	D	79	56.001	42.884	145.970	1.00	0.00
	ATOM 2241	CA	GLN	D	79	56.536	44.191	145.649	1.00	0.00
	ATOM 2242	C	GLN	D	79	58.000	44.054	145.245	1.00	0.00
5	ATOM 2243	O	GLN	D	79	58.666	43.085	145.609	1.00	0.00
	ATOM 2244	CB	GLN	D	79	56.394	45.135	146.855	1.00	0.00
	ATOM 2245	CG	GLN	D	79	55.148	46.025	146.771	1.00	0.00
	ATOM 2246	CD	GLN	D	79	55.119	46.803	145.462	1.00	0.00
	ATOM 2247	OE1	GLN	D	79	54.128	46.793	144.740	1.00	0.00
10	ATOM 2248	NE2	GLN	D	79	56.229	47.455	145.122	1.00	0.00
	ATOM 2249	N	ASN	D	80	58.487	45.038	144.483	1.00	0.00
	ATOM 2250	CA	ASN	D	80	59.843	45.042	143.958	1.00	0.00
	ATOM 2251	C	ASN	D	80	60.836	45.512	145.018	1.00	0.00
	ATOM 2252	O	ASN	D	80	60.477	46.259	145.929	1.00	0.00
15	ATOM 2253	CB	ASN	D	80	59.938	45.951	142.727	1.00	0.00
	ATOM 2254	CG	ASN	D	80	58.952	45.577	141.625	1.00	0.00
	ATOM 2255	OD1	ASN	D	80	58.146	46.407	141.211	1.00	0.00
	ATOM 2256	ND2	ASN	D	80	59.007	44.335	141.144	1.00	0.00
	ATOM 2257	N	MET	D	81	62.100	45.101	144.874	1.00	0.00
20	ATOM 2258	CA	MET	D	81	63.180	45.531	145.747	1.00	0.00
	ATOM 2259	C	MET	D	81	64.495	45.607	144.977	1.00	0.00
	ATOM 2260	O	MET	D	81	64.720	44.832	144.045	1.00	0.00
	ATOM 2261	CB	MET	D	81	63.289	44.600	146.958	1.00	0.00
	ATOM 2262	CG	MET	D	81	63.545	43.145	146.545	1.00	0.00
25	ATOM 2263	SD	MET	D	81	63.935	42.031	147.913	1.00	0.00

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	ATOM 2264	CE	MET	D	81	62.287	41.914	148.642	1.00	0.00
	ATOM 2265	N	GLY	D	82	65.350	46.546	145.393	1.00	0.00
	ATOM 2266	CA	GLY	D	82	66.688	46.706	144.857	1.00	0.00
	ATOM 2267	C	GLY	D	82	67.604	45.678	145.513	1.00	0.00
5	ATOM 2268	O	GLY	D	82	67.591	45.567	146.738	1.00	0.00
	ATOM 2269	N	ILE	D	83	68.381	44.935	144.714	1.00	0.00
	ATOM 2270	CA	ILE	D	83	69.385	43.987	145.191	1.00	0.00
	ATOM 2271	C	ILE	D	83	70.724	44.340	144.549	1.00	0.00
	ATOM 2272	O	ILE	D	83	70.764	44.605	143.351	1.00	0.00
10	ATOM 2273	CB	ILE	D	83	69.047	42.538	144.783	1.00	0.00
	ATOM 2274	CG1	ILE	D	83	67.568	42.121	144.821	1.00	0.00
	ATOM 2275	CG2	ILE	D	83	69.913	41.578	145.609	1.00	0.00
	ATOM 2276	CD1	ILE	D	83	67.036	41.784	146.213	1.00	0.00
	ATOM 2277	N	TRP	D	84	71.827	44.289	145.300	1.00	0.00
15	ATOM 2278	CA	TRP	D	84	73.157	44.348	144.711	1.00	0.00
	ATOM 2279	C	TRP	D	84	74.176	43.793	145.693	1.00	0.00
	ATOM 2280	O	TRP	D	84	73.944	43.800	146.898	1.00	0.00
	ATOM 2281	CB	TRP	D	84	73.520	45.779	144.310	1.00	0.00
	ATOM 2282	CG	TRP	D	84	73.732	46.731	145.441	1.00	0.00
20	ATOM 2283	CD1	TRP	D	84	74.931	47.069	145.960	1.00	0.00
	ATOM 2284	CD2	TRP	D	84	72.738	47.415	146.255	1.00	0.00
	ATOM 2285	NE1	TRP	D	84	74.763	47.953	147.003	1.00	0.00
	ATOM 2286	CE2	TRP	D	84	73.424	48.180	147.243	1.00	0.00
	ATOM 2287	CE3	TRP	D	84	71.327	47.463	146.269	1.00	0.00
25	ATOM 2288	CZ2	TRP	D	84	72.747	48.934	148.209	1.00	0.00

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5	ATOM 2289	CZ3	TRP	D	84	70.638	48.189	147.255	1.00	0.00
	ATOM 2290	CH2	TRP	D	84	71.347	48.899	148.240	1.00	0.00
	ATOM 2291	N	VAL	D	85	75.314	43.334	145.174	1.00	0.00
	ATOM 2292	CA	VAL	D	85	76.423	42.862	145.984	1.00	0.00
	ATOM 2293	C	VAL	D	85	77.536	43.902	145.923	1.00	0.00
10	ATOM 2294	O	VAL	D	85	77.771	44.490	144.868	1.00	0.00
	ATOM 2295	CB	VAL	D	85	76.855	41.457	145.532	1.00	0.00
	ATOM 2296	CG1	VAL	D	85	77.198	41.389	144.039	1.00	0.00
	ATOM 2297	CG2	VAL	D	85	78.039	40.962	146.369	1.00	0.00
	ATOM 2298	N	GLN	D	86	78.196	44.134	147.063	1.00	0.00
15	ATOM 2299	CA	GLN	D	86	79.329	45.031	147.198	1.00	0.00
	ATOM 2300	C	GLN	D	86	80.527	44.225	147.689	1.00	0.00
	ATOM 2301	O	GLN	D	86	80.451	43.612	148.748	1.00	0.00
	ATOM 2302	CB	GLN	D	86	78.978	46.156	148.177	1.00	0.00
	ATOM 2303	CG	GLN	D	86	80.172	47.076	148.466	1.00	0.00
20	ATOM 2304	CD	GLN	D	86	79.827	48.092	149.547	1.00	0.00
	ATOM 2305	OE1	GLN	D	86	79.295	49.159	149.253	1.00	0.00
	ATOM 2306	NE2	GLN	D	86	80.127	47.769	150.805	1.00	0.00
	ATOM 2307	N	ALA	D	87	81.631	44.252	146.940	1.00	0.00
	ATOM 2308	CA	ALA	D	87	82.903	43.680	147.347	1.00	0.00
25	ATOM 2309	C	ALA	D	87	83.735	44.791	147.977	1.00	0.00
	ATOM 2310	O	ALA	D	87	84.008	45.783	147.309	1.00	0.00
	ATOM 2311	CB	ALA	D	87	83.610	43.098	146.124	1.00	0.00
	ATOM 2312	N	GLU	D	88	84.121	44.638	149.248	1.00	0.00
	ATOM 2313	CA	GLU	D	88	84.954	45.596	149.961	1.00	0.00

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	ATOM 2314	C	GLU	D	88	86.293	44.930	150.262	1.00	0.00
	ATOM 2315	O	GLU	D	88	86.330	43.837	150.825	1.00	0.00
	ATOM 2316	CB	GLU	D	88	84.246	46.046	151.243	1.00	0.00
	ATOM 2317	CG	GLU	D	88	85.015	47.169	151.956	1.00	0.00
5	ATOM 2318	CD	GLU	D	88	84.418	47.495	153.322	1.00	0.00
	ATOM 2319	OE1	GLU	D	88	83.987	46.538	154.002	1.00	0.00
	ATOM 2320	OE2	GLU	D	88	84.409	48.696	153.668	1.00	0.00
	ATOM 2321	N	ASN	D	89	87.384	45.591	149.870	1.00	0.00
	ATOM 2322	CA	ASN	D	89	88.747	45.132	150.068	1.00	0.00
10	ATOM 2323	C	ASN	D	89	89.569	46.284	150.641	1.00	0.00
	ATOM 2324	O	ASN	D	89	89.141	47.437	150.613	1.00	0.00
	ATOM 2325	CB	ASN	D	89	89.315	44.692	148.714	1.00	0.00
	ATOM 2326	CG	ASN	D	89	90.444	43.674	148.818	1.00	0.00
	ATOM 2327	OD1	ASN	D	89	91.024	43.477	149.881	1.00	0.00
15	ATOM 2328	ND2	ASN	D	89	90.754	43.007	147.706	1.00	0.00
	ATOM 2329	N	ALA	D	90	90.777	45.971	151.118	1.00	0.00
	ATOM 2330	CA	ALA	D	90	91.714	46.943	151.656	1.00	0.00
	ATOM 2331	C	ALA	D	90	91.924	48.121	150.700	1.00	0.00
	ATOM 2332	O	ALA	D	90	91.962	49.267	151.141	1.00	0.00
20	ATOM 2333	CB	ALA	D	90	93.043	46.247	151.962	1.00	0.00
	ATOM 2334	N	LEU	D	91	92.076	47.840	149.397	1.00	0.00
	ATOM 2335	CA	LEU	D	91	92.440	48.852	148.412	1.00	0.00
	ATOM 2336	C	LEU	D	91	91.241	49.473	147.689	1.00	0.00
	ATOM 2337	O	LEU	D	91	91.446	50.233	146.744	1.00	0.00
25	ATOM 2338	CB	LEU	D	91	93.414	48.278	147.376	1.00	0.00

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		ATOM	2339	CG	LEU	D	91	94.721	47.679	147.919	1.00	0.00
		ATOM	2340	CD1	LEU	D	91	95.777	47.832	146.822	1.00	0.00
		ATOM	2341	CD2	LEU	D	91	95.274	48.353	149.180	1.00	0.00
		ATOM	2342	N	GLY	D	92	89.999	49.177	148.088	1.00	0.00
5		ATOM	2343	CA	GLY	D	92	88.848	49.790	147.442	1.00	0.00
		ATOM	2344	C	GLY	D	92	87.584	48.967	147.633	1.00	0.00
		ATOM	2345	O	GLY	D	92	87.614	47.904	148.247	1.00	0.00
		ATOM	2346	N	THR	D	93	86.475	49.466	147.084	1.00	0.00
		ATOM	2347	CA	THR	D	93	85.193	48.787	147.104	1.00	0.00
10		ATOM	2348	C	THR	D	93	84.548	48.904	145.725	1.00	0.00
		ATOM	2349	O	THR	D	93	84.746	49.902	145.032	1.00	0.00
		ATOM	2350	CB	THR	D	93	84.317	49.336	148.244	1.00	0.00
		ATOM	2351	OG1	THR	D	93	83.121	48.592	148.349	1.00	0.00
		ATOM	2352	CG2	THR	D	93	83.969	50.819	148.075	1.00	0.00
15		ATOM	2353	N	SER	D	94	83.807	47.870	145.323	1.00	0.00
		ATOM	2354	CA	SER	D	94	83.096	47.798	144.057	1.00	0.00
		ATOM	2355	C	SER	D	94	81.714	47.215	144.317	1.00	0.00
		ATOM	2356	O	SER	D	94	81.518	46.532	145.319	1.00	0.00
		ATOM	2357	CB	SER	D	94	83.879	46.919	143.079	1.00	0.00
20		ATOM	2358	OG	SER	D	94	84.099	45.643	143.647	1.00	0.00
		ATOM	2359	N	MET	D	95	80.761	47.468	143.416	1.00	0.00
		ATOM	2360	CA	MET	D	95	79.424	46.917	143.536	1.00	0.00
		ATOM	2361	C	MET	D	95	78.827	46.617	142.170	1.00	0.00
		ATOM	2362	O	MET	D	95	79.183	47.252	141.179	1.00	0.00
25		ATOM	2363	CB	MET	D	95	78.524	47.838	144.369	1.00	0.00

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	ATOM 2364	CG	MET	D	95	78.359	49.243	143.781	1.00	0.00
	ATOM 2365	SD	MET	D	95	77.201	50.280	144.712	1.00	0.00
	ATOM 2366	CE	MET	D	95	77.302	51.794	143.728	1.00	0.00
	ATOM 2367	N	SER	D	96	77.930	45.628	142.134	1.00	0.00
5	ATOM 2368	CA	SER	D	96	77.280	45.167	140.920	1.00	0.00
	ATOM 2369	C	SER	D	96	76.185	46.150	140.494	1.00	0.00
	ATOM 2370	O	SER	D	96	75.699	46.926	141.320	1.00	0.00
	ATOM 2371	CB	SER	D	96	76.707	43.766	141.175	1.00	0.00
	ATOM 2372	OG	SER	D	96	75.781	43.785	142.242	1.00	0.00
10	ATOM 2373	N	PRO	D	97	75.762	46.119	139.219	1.00	0.00
	ATOM 2374	CA	PRO	D	97	74.562	46.819	138.789	1.00	0.00
	ATOM 2375	C	PRO	D	97	73.370	46.332	139.617	1.00	0.00
	ATOM 2376	O	PRO	D	97	73.274	45.143	139.922	1.00	0.00
	ATOM 2377	CB	PRO	D	97	74.403	46.507	137.298	1.00	0.00
15	ATOM 2378	CG	PRO	D	97	75.199	45.217	137.099	1.00	0.00
	ATOM 2379	CD	PRO	D	97	76.321	45.336	138.127	1.00	0.00
	ATOM 2380	N	GLN	D	98	72.492	47.261	140.014	1.00	0.00
	ATOM 2381	CA	GLN	D	98	71.403	46.957	140.928	1.00	0.00
	ATOM 2382	C	GLN	D	98	70.252	46.273	140.191	1.00	0.00
20	ATOM 2383	O	GLN	D	98	69.859	46.699	139.106	1.00	0.00
	ATOM 2384	CB	GLN	D	98	70.939	48.207	141.688	1.00	0.00
	ATOM 2385	CG	GLN	D	98	72.114	48.925	142.373	1.00	0.00
	ATOM 2386	CD	GLN	D	98	71.677	49.803	143.545	1.00	0.00
	ATOM 2387	OE1	GLN	D	98	70.504	50.134	143.692	1.00	0.00
25	ATOM 2388	NE2	GLN	D	98	72.628	50.182	144.400	1.00	0.00

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	ATOM 2389	N	LEU D	99	69.734	45.198	140.790	1.00	0.00
	ATOM 2390	CA	LEU D	99	68.716	44.322	140.236	1.00	0.00
	ATOM 2391	C	LEU D	99	67.369	44.683	140.857	1.00	0.00
	ATOM 2392	O	LEU D	99	67.308	44.942	142.058	1.00	0.00
5	ATOM 2393	CB	LEU D	99	69.111	42.871	140.562	1.00	0.00
	ATOM 2394	CG	LEU D	99	68.936	41.916	139.375	1.00	0.00
	ATOM 2395	CD1	LEU D	99	69.638	40.594	139.699	1.00	0.00
	ATOM 2396	CD2	LEU D	99	67.458	41.663	139.062	1.00	0.00
	ATOM 2397	N	CYS D	100	66.306	44.702	140.045	1.00	0.00
10	ATOM 2398	CA	CYS D	100	64.950	45.006	140.477	1.00	0.00
	ATOM 2399	C	CYS D	100	64.054	43.798	140.226	1.00	0.00
	ATOM 2400	O	CYS D	100	63.702	43.521	139.081	1.00	0.00
	ATOM 2401	CB	CYS D	100	64.429	46.240	139.734	1.00	0.00
	ATOM 2402	SG	CYS D	100	62.981	46.974	140.524	1.00	0.00
15	ATOM 2403	N	LEU D	101	63.697	43.069	141.286	1.00	0.00
	ATOM 2404	CA	LEU D	101	62.858	41.885	141.184	1.00	0.00
	ATOM 2405	C	LEU D	101	61.826	41.881	142.301	1.00	0.00
	ATOM 2406	O	LEU D	101	62.003	42.545	143.322	1.00	0.00
	ATOM 2407	CB	LEU D	101	63.715	40.607	141.161	1.00	0.00
20	ATOM 2408	CG	LEU D	101	64.771	40.490	142.277	1.00	0.00
	ATOM 2409	CD1	LEU D	101	64.180	40.165	143.656	1.00	0.00
	ATOM 2410	CD2	LEU D	101	65.749	39.369	141.924	1.00	0.00
	ATOM 2411	N	ASP D	102	60.751	41.126	142.081	1.00	0.00
	ATOM 2412	CA	ASP D	102	59.827	40.700	143.112	1.00	0.00
25	ATOM 2413	C	ASP D	102	60.218	39.252	143.423	1.00	0.00

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		ATOM 2414	O	ASP	D	102	60.281	38.444	142.499	1.00	0.00
		ATOM 2415	CB	ASP	D	102	58.397	40.820	142.568	1.00	0.00
		ATOM 2416	CG	ASP	D	102	57.340	40.195	143.468	1.00	0.00
		ATOM 2417	OD1	ASP	D	102	57.722	39.713	144.552	1.00	0.00
5		ATOM 2418	OD2	ASP	D	102	56.162	40.196	143.052	1.00	0.00
		ATOM 2419	N	PRO	D	103	60.511	38.891	144.682	1.00	0.00
		ATOM 2420	CA	PRO	D	103	60.817	37.520	145.058	1.00	0.00
		ATOM 2421	C	PRO	D	103	59.815	36.503	144.503	1.00	0.00
		ATOM 2422	O	PRO	D	103	60.208	35.407	144.107	1.00	0.00
10		ATOM 2423	CB	PRO	D	103	60.846	37.512	146.584	1.00	0.00
		ATOM 2424	CG	PRO	D	103	61.244	38.941	146.938	1.00	0.00
		ATOM 2425	CD	PRO	D	103	60.595	39.773	145.834	1.00	0.00
		ATOM 2426	N	MET	D	104	58.526	36.859	144.436	1.00	0.00
		ATOM 2427	CA	MET	D	104	57.506	35.934	143.962	1.00	0.00
15		ATOM 2428	C	MET	D	104	57.505	35.774	142.434	1.00	0.00
		ATOM 2429	O	MET	D	104	56.827	34.884	141.921	1.00	0.00
		ATOM 2430	CB	MET	D	104	56.145	36.297	144.566	1.00	0.00
		ATOM 2431	CG	MET	D	104	56.223	36.230	146.101	1.00	0.00
		ATOM 2432	SD	MET	D	104	56.769	34.680	146.868	1.00	0.00
20		ATOM 2433	CE	MET	D	104	55.387	33.594	146.453	1.00	0.00
		ATOM 2434	N	ASP	D	105	58.306	36.573	141.715	1.00	0.00
		ATOM 2435	CA	ASP	D	105	58.559	36.448	140.282	1.00	0.00
		ATOM 2436	C	ASP	D	105	59.737	35.523	139.968	1.00	0.00
		ATOM 2437	O	ASP	D	105	59.874	35.104	138.820	1.00	0.00
25		ATOM 2438	CB	ASP	D	105	58.824	37.828	139.655	1.00	0.00

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		ATOM 2439	CG	ASP	D	105	57.595	38.718	139.507	1.00	0.00
		ATOM 2440	OD1	ASP	D	105	56.466	38.199	139.640	1.00	0.00
		ATOM 2441	OD2	ASP	D	105	57.809	39.913	139.215	1.00	0.00
		ATOM 2442	N	VAL	D	106	60.598	35.218	140.947	1.00	0.00
5		ATOM 2443	CA	VAL	D	106	61.793	34.401	140.740	1.00	0.00
		ATOM 2444	C	VAL	D	106	61.732	33.131	141.587	1.00	0.00
		ATOM 2445	O	VAL	D	106	62.753	32.643	142.066	1.00	0.00
		ATOM 2446	CB	VAL	D	106	63.063	35.228	141.013	1.00	0.00
		ATOM 2447	CG1	VAL	D	106	63.253	36.303	139.938	1.00	0.00
10		ATOM 2448	CG2	VAL	D	106	63.046	35.879	142.401	1.00	0.00
		ATOM 2449	N	VAL	D	107	60.534	32.570	141.759	1.00	0.00
		ATOM 2450	CA	VAL	D	107	60.354	31.362	142.544	1.00	0.00
		ATOM 2451	C	VAL	D	107	60.953	30.172	141.802	1.00	0.00
		ATOM 2452	O	VAL	D	107	60.611	29.917	140.648	1.00	0.00
15		ATOM 2453	CB	VAL	D	107	58.875	31.168	142.899	1.00	0.00
		ATOM 2454	CG1	VAL	D	107	58.676	29.893	143.718	1.00	0.00
		ATOM 2455	CG2	VAL	D	107	58.375	32.347	143.740	1.00	0.00
		ATOM 2456	N	LYS	D	108	61.854	29.451	142.474	1.00	0.00
		ATOM 2457	CA	LYS	D	108	62.477	28.254	141.941	1.00	0.00
20		ATOM 2458	C	LYS	D	108	61.536	27.069	142.149	1.00	0.00
		ATOM 2459	O	LYS	D	108	61.451	26.526	143.250	1.00	0.00
		ATOM 2460	CB	LYS	D	108	63.830	28.049	142.628	1.00	0.00
		ATOM 2461	CG	LYS	D	108	64.507	26.732	142.229	1.00	0.00
		ATOM 2462	CD	LYS	D	108	65.874	26.612	142.917	1.00	0.00
25		ATOM 2463	CE	LYS	D	108	66.188	25.174	143.350	1.00	0.00

		ATOM 2464	NZ	LYS	D	108	65.280	24.696	144.416	1.00	0.00
		ATOM 2465	N	LEU	D	109	60.849	26.659	141.081	1.00	0.00
		ATOM 2466	CA	LEU	D	109	60.003	25.476	141.090	1.00	0.00
		ATOM 2467	C	LEU	D	109	60.857	24.212	141.009	1.00	0.00
5		ATOM 2468	O	LEU	D	109	61.912	24.194	140.376	1.00	0.00
		ATOM 2469	CB	LEU	D	109	59.019	25.519	139.911	1.00	0.00
		ATOM 2470	CG	LEU	D	109	57.683	26.212	140.214	1.00	0.00
		ATOM 2471	CD1	LEU	D	109	57.850	27.580	140.878	1.00	0.00
		ATOM 2472	CD2	LEU	D	109	56.904	26.373	138.905	1.00	0.00
10		ATOM 2473	N	GLU	D	110	60.348	23.142	141.621	1.00	0.00
		ATOM 2474	CA	GLU	D	110	60.795	21.776	141.412	1.00	0.00
		ATOM 2475	C	GLU	D	110	59.667	21.055	140.670	1.00	0.00
		ATOM 2476	O	GLU	D	110	58.518	21.499	140.724	1.00	0.00
		ATOM 2477	CB	GLU	D	110	61.136	21.139	142.765	1.00	0.00
15		ATOM 2478	CG	GLU	D	110	62.519	21.612	143.234	1.00	0.00
		ATOM 2479	CD	GLU	D	110	62.783	21.360	144.716	1.00	0.00
		ATOM 2480	OE1	GLU	D	110	62.242	20.367	145.251	1.00	0.00
		ATOM 2481	OE2	GLU	D	110	63.537	22.183	145.285	1.00	0.00
		ATOM 2482	N	PRO	D	111	59.988	19.996	139.913	1.00	0.00
20		ATOM 2483	CA	PRO	D	111	59.042	19.349	139.025	1.00	0.00
		ATOM 2484	C	PRO	D	111	57.839	18.771	139.770	1.00	0.00
		ATOM 2485	O	PRO	D	111	57.930	18.452	140.955	1.00	0.00
		ATOM 2486	CB	PRO	D	111	59.812	18.241	138.303	1.00	0.00
		ATOM 2487	CG	PRO	D	111	61.094	18.063	139.114	1.00	0.00
25		ATOM 2488	CD	PRO	D	111	61.315	19.429	139.752	1.00	0.00

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	ATOM 2489	N	PRO D 112	56.717	18.604	139.059	1.00	0.00
	ATOM 2490	CA	PRO D 112	55.515	17.983	139.584	1.00	0.00
	ATOM 2491	C	PRO D 112	55.718	16.469	139.716	1.00	0.00
	ATOM 2492	O	PRO D 112	56.693	15.905	139.217	1.00	0.00
5	ATOM 2493	CB	PRO D 112	54.426	18.329	138.566	1.00	0.00
	ATOM 2494	CG	PRO D 112	55.220	18.293	137.269	1.00	0.00
	ATOM 2495	CD	PRO D 112	56.552	18.926	137.652	1.00	0.00
	ATOM 2496	N	MET D 113	54.784	15.815	140.406	1.00	0.00
	ATOM 2497	CA	MET D 113	54.879	14.415	140.781	1.00	0.00
10	ATOM 2498	C	MET D 113	54.041	13.593	139.808	1.00	0.00
	ATOM 2499	O	MET D 113	52.840	13.446	140.010	1.00	0.00
	ATOM 2500	CB	MET D 113	54.379	14.261	142.222	1.00	0.00
	ATOM 2501	CG	MET D 113	55.247	15.048	143.215	1.00	0.00
	ATOM 2502	SD	MET D 113	54.370	15.607	144.696	1.00	0.00
15	ATOM 2503	CE	MET D 113	53.926	14.013	145.422	1.00	0.00
	ATOM 2504	N	LEU D 114	54.671	13.072	138.752	1.00	0.00
	ATOM 2505	CA	LEU D 114	54.011	12.273	137.728	1.00	0.00
	ATOM 2506	C	LEU D 114	54.072	10.796	138.091	1.00	0.00
	ATOM 2507	O	LEU D 114	55.136	10.294	138.448	1.00	0.00
20	ATOM 2508	CB	LEU D 114	54.697	12.532	136.385	1.00	0.00
	ATOM 2509	CG	LEU D 114	54.068	11.817	135.179	1.00	0.00
	ATOM 2510	CD1	LEU D 114	52.662	12.344	134.886	1.00	0.00
	ATOM 2511	CD2	LEU D 114	54.952	12.003	133.940	1.00	0.00
	ATOM 2512	N	ARG D 115	52.937	10.099	137.981	1.00	0.00
25	ATOM 2513	CA	ARG D 115	52.855	8.663	138.185	1.00	0.00

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5	ATOM 2514	C	ARG	D	115	51.719	8.092	137.330	1.00	0.00
	ATOM 2515	O	ARG	D	115	50.959	8.841	136.717	1.00	0.00
	ATOM 2516	CB	ARG	D	115	52.683	8.359	139.683	1.00	0.00
	ATOM 2517	CG	ARG	D	115	51.330	8.849	140.216	1.00	0.00
	ATOM 2518	CD	ARG	D	115	51.119	8.493	141.690	1.00	0.00
10	ATOM 2519	NE	ARG	D	115	51.871	9.376	142.593	1.00	0.00
	ATOM 2520	CZ	ARG	D	115	51.396	10.510	143.136	1.00	0.00
	ATOM 2521	NH1	ARG	D	115	50.248	11.062	142.723	1.00	0.00
	ATOM 2522	NH2	ARG	D	115	52.068	11.101	144.128	1.00	0.00
	ATOM 2523	N	THR	D	116	51.593	6.764	137.305	1.00	0.00
15	ATOM 2524	CA	THR	D	116	50.475	6.065	136.684	1.00	0.00
	ATOM 2525	C	THR	D	116	49.224	6.267	137.546	1.00	0.00
	ATOM 2526	O	THR	D	116	49.344	6.317	138.770	1.00	0.00
	ATOM 2527	CB	THR	D	116	50.827	4.570	136.596	1.00	0.00
	ATOM 2528	OG1	THR	D	116	52.185	4.417	136.236	1.00	0.00
20	ATOM 2529	CG2	THR	D	116	49.967	3.827	135.571	1.00	0.00
	ATOM 2530	N	MET	D	117	48.022	6.332	136.951	1.00	0.00
	ATOM 2531	CA	MET	D	117	46.811	6.215	137.761	1.00	0.00
	ATOM 2532	C	MET	D	117	46.825	4.847	138.439	1.00	0.00
	ATOM 2533	O	MET	D	117	47.055	3.835	137.777	1.00	0.00
25	ATOM 2534	CB	MET	D	117	45.513	6.391	136.952	1.00	0.00
	ATOM 2535	CG	MET	D	117	44.297	6.136	137.869	1.00	0.00
	ATOM 2536	SD	MET	D	117	42.633	6.436	137.219	1.00	0.00
	ATOM 2537	CE	MET	D	117	42.508	5.175	135.935	1.00	0.00
	ATOM 2538	N	ASP	D	118	46.554	4.839	139.748	1.00	0.00

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	ATOM 2539	CA	ASP D 118	46.402	3.636	140.547	1.00	0.00
	ATOM 2540	C	ASP D 118	44.942	3.452	140.990	1.00	0.00
	ATOM 2541	O	ASP D 118	44.247	2.653	140.363	1.00	0.00
	ATOM 2542	CB	ASP D 118	47.442	3.611	141.676	1.00	0.00
5	ATOM 2543	CG	ASP D 118	47.237	2.411	142.593	1.00	0.00
	ATOM 2544	OD1	ASP D 118	47.158	2.637	143.819	1.00	0.00
	ATOM 2545	OD2	ASP D 118	47.160	1.290	142.047	1.00	0.00
	ATOM 2546	N	PRO D 119	44.438	4.154	142.026	1.00	0.00
	ATOM 2547	CA	PRO D 119	43.164	3.834	142.660	1.00	0.00
10	ATOM 2548	C	PRO D 119	42.009	3.778	141.659	1.00	0.00
	ATOM 2549	O	PRO D 119	41.723	4.759	140.975	1.00	0.00
	ATOM 2550	CB	PRO D 119	42.939	4.902	143.738	1.00	0.00
	ATOM 2551	CG	PRO D 119	43.833	6.056	143.290	1.00	0.00
	ATOM 2552	CD	PRO D 119	45.018	5.315	142.678	1.00	0.00
15	ATOM 2553	N	SER D 120	41.363	2.610	141.580	1.00	0.00
	ATOM 2554	CA	SER D 120	40.271	2.314	140.670	1.00	0.00
	ATOM 2555	C	SER D 120	39.486	1.131	141.254	1.00	0.00
	ATOM 2556	O	SER D 120	40.092	0.305	141.936	1.00	0.00
	ATOM 2557	CB	SER D 120	40.853	1.951	139.298	1.00	0.00
20	ATOM 2558	OG	SER D 120	39.819	1.775	138.353	1.00	0.00
	ATOM 2559	N	PRO D 121	38.164	1.026	141.016	1.00	0.00
	ATOM 2560	CA	PRO D 121	37.368	-0.157	141.327	1.00	0.00
	ATOM 2561	C	PRO D 121	37.911	-1.401	140.611	1.00	0.00
	ATOM 2562	O	PRO D 121	37.481	-1.727	139.505	1.00	0.00
25	ATOM 2563	CB	PRO D 121	35.930	0.182	140.900	1.00	0.00

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5	ATOM 2564	CG	PRO	D	121	35.895	1.706	140.923	1.00	0.00
	ATOM 2565	CD	PRO	D	121	37.313	2.087	140.504	1.00	0.00
	ATOM 2566	N	GLU	D	122	38.871	-2.082	141.247	1.00	0.00
	ATOM 2567	CA	GLU	D	122	39.580	-3.237	140.713	1.00	0.00
	ATOM 2568	C	GLU	D	122	40.345	-2.885	139.428	1.00	0.00
10	ATOM 2569	O	GLU	D	122	40.416	-1.722	139.027	1.00	0.00
	ATOM 2570	CB	GLU	D	122	38.620	-4.430	140.531	1.00	0.00
	ATOM 2571	CG	GLU	D	122	37.780	-4.723	141.784	1.00	0.00
	ATOM 2572	CD	GLU	D	122	38.650	-4.989	143.006	1.00	0.00
	ATOM 2573	OE1	GLU	D	122	38.623	-4.140	143.923	1.00	0.00
15	ATOM 2574	OE2	GLU	D	122	39.337	-6.034	142.993	1.00	0.00
	ATOM 2575	N	ALA	D	123	40.933	-3.906	138.789	1.00	0.00
	ATOM 2576	CA	ALA	D	123	41.681	-3.792	137.541	1.00	0.00
	ATOM 2577	C	ALA	D	123	42.909	-2.881	137.685	1.00	0.00
	ATOM 2578	O	ALA	D	123	43.287	-2.505	138.793	1.00	0.00
20	ATOM 2579	CB	ALA	D	123	40.743	-3.357	136.405	1.00	0.00
	ATOM 2580	N	ALA	D	124	43.546	-2.547	136.556	1.00	0.00
	ATOM 2581	CA	ALA	D	124	44.692	-1.650	136.498	1.00	0.00
	ATOM 2582	C	ALA	D	124	44.936	-1.181	135.056	1.00	0.00
	ATOM 2583	O	ALA	D	124	44.734	0.001	134.786	1.00	0.00
25	ATOM 2584	CB	ALA	D	124	45.929	-2.267	137.168	1.00	0.00
	ATOM 2585	N	PRO	D	125	45.349	-2.048	134.111	1.00	0.00
	ATOM 2586	CA	PRO	D	125	45.569	-1.641	132.728	1.00	0.00
	ATOM 2587	C	PRO	D	125	44.230	-1.309	132.051	1.00	0.00
	ATOM 2588	O	PRO	D	125	43.318	-2.133	132.103	1.00	0.00

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5	ATOM 2589	CB	PRO	D	125	46.245	-2.838	132.053	1.00	0.00
	ATOM 2590	CG	PRO	D	125	45.740	-4.033	132.861	1.00	0.00
	ATOM 2591	CD	PRO	D	125	45.655	-3.461	134.275	1.00	0.00
	ATOM 2592	N	PRO	D	126	44.083	-0.126	131.429	1.00	0.00
	ATOM 2593	CA	PRO	D	126	42.840	0.293	130.798	1.00	0.00
10	ATOM 2594	C	PRO	D	126	42.761	-0.244	129.357	1.00	0.00
	ATOM 2595	O	PRO	D	126	42.731	-1.455	129.148	1.00	0.00
	ATOM 2596	CB	PRO	D	126	42.865	1.823	130.917	1.00	0.00
	ATOM 2597	CG	PRO	D	126	44.348	2.139	130.725	1.00	0.00
	ATOM 2598	CD	PRO	D	126	45.018	0.990	131.481	1.00	0.00
15	ATOM 2599	N	GLN	D	127	42.708	0.648	128.362	1.00	0.00
	ATOM 2600	CA	GLN	D	127	42.527	0.344	126.952	1.00	0.00
	ATOM 2601	C	GLN	D	127	43.867	0.024	126.287	1.00	0.00
	ATOM 2602	O	GLN	D	127	44.895	0.585	126.660	1.00	0.00
	ATOM 2603	CB	GLN	D	127	41.867	1.569	126.305	1.00	0.00
20	ATOM 2604	CG	GLN	D	127	41.724	1.447	124.784	1.00	0.00
	ATOM 2605	CD	GLN	D	127	41.078	2.678	124.160	1.00	0.00
	ATOM 2606	OE1	GLN	D	127	40.594	3.566	124.855	1.00	0.00
	ATOM 2607	NE2	GLN	D	127	41.070	2.737	122.829	1.00	0.00
	ATOM 2608	N	ALA	D	128	43.836	-0.856	125.278	1.00	0.00
25	ATOM 2609	CA	ALA	D	128	44.983	-1.228	124.459	1.00	0.00
	ATOM 2610	C	ALA	D	128	45.663	-0.004	123.839	1.00	0.00
	ATOM 2611	O	ALA	D	128	44.999	0.885	123.307	1.00	0.00
	ATOM 2612	CB	ALA	D	128	44.530	-2.201	123.368	1.00	0.00
	ATOM 2613	N	GLY	D	129	46.995	0.030	123.909	1.00	0.00

5	ATOM	2614	CA	GLY	D	129	47.835	1.074	123.350	1.00	0.00
	ATOM	2615	C	GLY	D	129	47.795	2.385	124.139	1.00	0.00
	ATOM	2616	O	GLY	D	129	48.344	3.381	123.661	1.00	0.00
	ATOM	2617	N	CYS	D	130	47.156	2.398	125.323	1.00	0.00
	ATOM	2618	CA	CYS	D	130	46.984	3.589	126.148	1.00	0.00
	ATOM	2619	C	CYS	D	130	47.660	3.435	127.511	1.00	0.00
	ATOM	2620	O	CYS	D	130	47.751	2.331	128.051	1.00	0.00
	ATOM	2621	CB	CYS	D	130	45.500	3.918	126.376	1.00	0.00
10	ATOM	2622	SG	CYS	D	130	44.386	4.115	124.957	1.00	0.00
	ATOM	2623	N	LEU	D	131	48.085	4.575	128.072	1.00	0.00
	ATOM	2624	CA	LEU	D	131	48.574	4.740	129.436	1.00	0.00
	ATOM	2625	C	LEU	D	131	47.586	5.618	130.205	1.00	0.00
	ATOM	2626	O	LEU	D	131	47.062	6.584	129.653	1.00	0.00
	ATOM	2627	CB	LEU	D	131	49.936	5.456	129.432	1.00	0.00
15	ATOM	2628	CG	LEU	D	131	51.153	4.560	129.168	1.00	0.00
	ATOM	2629	CD1	LEU	D	131	52.395	5.440	128.975	1.00	0.00
	ATOM	2630	CD2	LEU	D	131	51.422	3.626	130.352	1.00	0.00
	ATOM	2631	N	GLN	D	132	47.380	5.310	131.491	1.00	0.00
20	ATOM	2632	CA	GLN	D	132	46.635	6.142	132.428	1.00	0.00
	ATOM	2633	C	GLN	D	132	47.621	6.811	133.388	1.00	0.00
	ATOM	2634	O	GLN	D	132	48.384	6.125	134.062	1.00	0.00
	ATOM	2635	CB	GLN	D	132	45.568	5.312	133.159	1.00	0.00
	ATOM	2636	CG	GLN	D	132	46.097	4.052	133.869	1.00	0.00
	ATOM	2637	CD	GLN	D	132	44.983	3.278	134.572	1.00	0.00
25	ATOM	2638	OE1	GLN	D	132	43.930	3.038	133.990	1.00	0.00

5	ATOM	2639	NE2	GLN	D	132	45.198	2.885	135.828	1.00	0.00
	ATOM	2640	N	LEU	D	133	47.624	8.145	133.434	1.00	0.00
	ATOM	2641	CA	LEU	D	133	48.544	8.942	134.235	1.00	0.00
	ATOM	2642	C	LEU	D	133	47.773	9.706	135.303	1.00	0.00
	ATOM	2643	O	LEU	D	133	46.567	9.897	135.182	1.00	0.00
	ATOM	2644	CB	LEU	D	133	49.263	9.953	133.334	1.00	0.00
	ATOM	2645	CG	LEU	D	133	50.026	9.321	132.162	1.00	0.00
	ATOM	2646	CD1	LEU	D	133	50.512	10.437	131.233	1.00	0.00
10	ATOM	2647	CD2	LEU	D	133	51.222	8.496	132.648	1.00	0.00
	ATOM	2648	N	CYS	D	134	48.479	10.195	136.321	1.00	0.00
	ATOM	2649	CA	CYS	D	134	47.970	11.190	137.250	1.00	0.00
	ATOM	2650	C	CYS	D	134	49.161	11.975	137.791	1.00	0.00
15	ATOM	2651	O	CYS	D	134	50.281	11.458	137.810	1.00	0.00
	ATOM	2652	CB	CYS	D	134	47.126	10.535	138.356	1.00	0.00
	ATOM	2653	SG	CYS	D	134	48.138	9.624	139.539	1.00	0.00
	ATOM	2654	N	TRP	D	135	48.941	13.232	138.191	1.00	0.00
	ATOM	2655	CA	TRP	D	135	50.006	14.058	138.736	1.00	0.00
	ATOM	2656	C	TRP	D	135	49.485	15.095	139.721	1.00	0.00
20	ATOM	2657	O	TRP	D	135	48.323	15.494	139.654	1.00	0.00
	ATOM	2658	CB	TRP	D	135	50.834	14.717	137.623	1.00	0.00
	ATOM	2659	CG	TRP	D	135	50.075	15.515	136.609	1.00	0.00
	ATOM	2660	CD1	TRP	D	135	49.731	16.815	136.718	1.00	0.00
	ATOM	2661	CD2	TRP	D	135	49.595	15.087	135.304	1.00	0.00
	ATOM	2662	NE1	TRP	D	135	49.063	17.229	135.583	1.00	0.00
25	ATOM	2663	CE2	TRP	D	135	48.962	16.196	134.672	1.00	0.00

5	ATOM	2664	CE3	TRP	D	135	49.624	13.869	134.593	1.00	0.00
	ATOM	2665	CZ2	TRP	D	135	48.395	16.098	133.393	1.00	0.00
	ATOM	2666	CZ3	TRP	D	135	49.106	13.776	133.290	1.00	0.00
	ATOM	2667	CH2	TRP	D	135	48.491	14.888	132.691	1.00	0.00
	ATOM	2668	N	GLU	D	136	50.388	15.512	140.617	1.00	0.00
	ATOM	2669	CA	GLU	D	136	50.220	16.577	141.594	1.00	0.00
	ATOM	2670	C	GLU	D	136	51.289	17.637	141.328	1.00	0.00
	ATOM	2671	O	GLU	D	136	52.351	17.302	140.802	1.00	0.00
10	ATOM	2672	CB	GLU	D	136	50.490	16.027	143.002	1.00	0.00
	ATOM	2673	CG	GLU	D	136	49.589	14.865	143.426	1.00	0.00
	ATOM	2674	CD	GLU	D	136	50.135	14.210	144.690	1.00	0.00
	ATOM	2675	OE1	GLU	D	136	50.201	12.960	144.687	1.00	0.00
	ATOM	2676	OE2	GLU	D	136	50.516	14.960	145.617	1.00	0.00
	ATOM	2677	N	PRO	D	137	51.080	18.890	141.753	1.00	0.00
	ATOM	2678	CA	PRO	D	137	52.162	19.853	141.844	1.00	0.00
	ATOM	2679	C	PRO	D	137	53.186	19.442	142.894	1.00	0.00
15	ATOM	2680	O	PRO	D	137	52.868	18.724	143.841	1.00	0.00
	ATOM	2681	CB	PRO	D	137	51.521	21.162	142.298	1.00	0.00
	ATOM	2682	CG	PRO	D	137	50.233	20.729	142.992	1.00	0.00
	ATOM	2683	CD	PRO	D	137	49.840	19.440	142.274	1.00	0.00
	ATOM	2684	N	TRP	D	138	54.396	19.995	142.767	1.00	0.00
	ATOM	2685	CA	TRP	D	138	55.333	20.062	143.870	1.00	0.00
	ATOM	2686	C	TRP	D	138	54.658	20.836	145.001	1.00	0.00
	ATOM	2687	O	TRP	D	138	54.367	22.024	144.862	1.00	0.00
25	ATOM	2688	CB	TRP	D	138	56.612	20.757	143.408	1.00	0.00

	ATOM 2689	CG	TRP	D	138	57.668	20.921	144.453	1.00	0.00
	ATOM 2690	CD1	TRP	D	138	58.219	19.922	145.178	1.00	0.00
	ATOM 2691	CD2	TRP	D	138	58.359	22.138	144.860	1.00	0.00
	ATOM 2692	NE1	TRP	D	138	59.200	20.427	146.004	1.00	0.00
5	ATOM 2693	CE2	TRP	D	138	59.336	21.789	145.836	1.00	0.00
	ATOM 2694	CE3	TRP	D	138	58.308	23.491	144.459	1.00	0.00
	ATOM 2695	CZ2	TRP	D	138	60.219	22.727	146.381	1.00	0.00
	ATOM 2696	CZ3	TRP	D	138	59.212	24.435	144.979	1.00	0.00
	ATOM 2697	CH2	TRP	D	138	60.159	24.059	145.946	1.00	0.00
10	ATOM 2698	N	GLN	D	139	54.362	20.134	146.095	1.00	0.00
	ATOM 2699	CA	GLN	D	139	53.418	20.587	147.102	1.00	0.00
	ATOM 2700	C	GLN	D	139	53.743	21.966	147.710	1.00	0.00
	ATOM 2701	O	GLN	D	139	52.818	22.761	147.865	1.00	0.00
	ATOM 2702	CB	GLN	D	139	53.165	19.471	148.128	1.00	0.00
15	ATOM 2703	CG	GLN	D	139	52.503	18.253	147.450	1.00	0.00
	ATOM 2704	CD	GLN	D	139	52.192	17.121	148.429	1.00	0.00
	ATOM 2705	OE1	GLN	D	139	52.540	17.198	149.605	1.00	0.00
	ATOM 2706	NE2	GLN	D	139	51.537	16.057	147.961	1.00	0.00
	ATOM 2707	N	PRO	D	140	55.008	22.323	148.011	1.00	0.00
20	ATOM 2708	CA	PRO	D	140	55.363	23.657	148.490	1.00	0.00
	ATOM 2709	C	PRO	D	140	54.885	24.785	147.571	1.00	0.00
	ATOM 2710	O	PRO	D	140	54.628	25.892	148.042	1.00	0.00
	ATOM 2711	CB	PRO	D	140	56.890	23.672	148.613	1.00	0.00
	ATOM 2712	CG	PRO	D	140	57.238	22.200	148.809	1.00	0.00
25	ATOM 2713	CD	PRO	D	140	56.195	21.489	147.949	1.00	0.00

		ATOM 2714	N	GLY D 141	54.768	24.505	146.266	1.00	0.00
		ATOM 2715	CA	GLY D 141	54.319	25.454	145.263	1.00	0.00
		ATOM 2716	C	GLY D 141	52.880	25.213	144.806	1.00	0.00
		ATOM 2717	O	GLY D 141	52.459	25.850	143.845	1.00	0.00
5		ATOM 2718	N	LEU D 142	52.102	24.337	145.464	1.00	0.00
		ATOM 2719	CA	LEU D 142	50.733	24.048	145.029	1.00	0.00
		ATOM 2720	C	LEU D 142	49.860	25.303	145.013	1.00	0.00
		ATOM 2721	O	LEU D 142	48.951	25.413	144.194	1.00	0.00
		ATOM 2722	CB	LEU D 142	50.102	22.894	145.828	1.00	0.00
10		ATOM 2723	CG	LEU D 142	49.691	23.190	147.285	1.00	0.00
		ATOM 2724	CD1	LEU D 142	48.282	23.795	147.399	1.00	0.00
		ATOM 2725	CD2	LEU D 142	49.663	21.874	148.074	1.00	0.00
		ATOM 2726	N	HIS D 143	50.151	26.254	145.908	1.00	0.00
		ATOM 2727	CA	HIS D 143	49.454	27.529	145.988	1.00	0.00
15		ATOM 2728	C	HIS D 143	49.586	28.338	144.692	1.00	0.00
		ATOM 2729	O	HIS D 143	48.720	29.156	144.388	1.00	0.00
		ATOM 2730	CB	HIS D 143	49.961	28.316	147.204	1.00	0.00
		ATOM 2731	CG	HIS D 143	51.366	28.853	147.073	1.00	0.00
		ATOM 2732	ND1	HIS D 143	52.494	28.145	147.468	1.00	0.00
20		ATOM 2733	CD2	HIS D 143	51.839	30.063	146.622	1.00	0.00
		ATOM 2734	CE1	HIS D 143	53.555	28.944	147.260	1.00	0.00
		ATOM 2735	NE2	HIS D 143	53.224	30.127	146.740	1.00	0.00
		ATOM 2736	N	ILE D 144	50.666	28.120	143.932	1.00	0.00
		ATOM 2737	CA	ILE D 144	50.905	28.791	142.668	1.00	0.00
25		ATOM 2738	C	ILE D 144	50.060	28.103	141.595	1.00	0.00

5	ATOM	2739	O	ILE	D	144	50.201	26.900	141.380	1.00	0.00
	ATOM	2740	CB	ILE	D	144	52.406	28.753	142.313	1.00	0.00
	ATOM	2741	CG1	ILE	D	144	53.256	29.264	143.492	1.00	0.00
	ATOM	2742	CG2	ILE	D	144	52.659	29.598	141.059	1.00	0.00
	ATOM	2743	CD1	ILE	D	144	54.760	29.258	143.213	1.00	0.00
	ATOM	2744	N	ASN	D	145	49.211	28.871	140.901	1.00	0.00
	ATOM	2745	CA	ASN	D	145	48.515	28.408	139.708	1.00	0.00
	ATOM	2746	C	ASN	D	145	49.543	28.226	138.591	1.00	0.00
10	ATOM	2747	O	ASN	D	145	50.227	29.186	138.233	1.00	0.00
	ATOM	2748	CB	ASN	D	145	47.447	29.431	139.298	1.00	0.00
	ATOM	2749	CG	ASN	D	145	46.734	29.021	138.010	1.00	0.00
	ATOM	2750	OD1	ASN	D	145	46.626	27.838	137.703	1.00	0.00
15	ATOM	2751	ND2	ASN	D	145	46.249	29.997	137.244	1.00	0.00
	ATOM	2752	N	GLN	D	146	49.675	27.001	138.070	1.00	0.00
	ATOM	2753	CA	GLN	D	146	50.727	26.623	137.136	1.00	0.00
	ATOM	2754	C	GLN	D	146	50.145	25.937	135.899	1.00	0.00
	ATOM	2755	O	GLN	D	146	49.112	25.274	135.975	1.00	0.00
	ATOM	2756	CB	GLN	D	146	51.704	25.676	137.836	1.00	0.00
	ATOM	2757	CG	GLN	D	146	52.503	26.318	138.974	1.00	0.00
20	ATOM	2758	CD	GLN	D	146	53.086	25.258	139.906	1.00	0.00
	ATOM	2759	OE1	GLN	D	146	54.119	24.666	139.608	1.00	0.00
	ATOM	2760	NE2	GLN	D	146	52.428	25.011	141.038	1.00	0.00
25	ATOM	2761	N	LYS	D	147	50.847	26.086	134.771	1.00	0.00
	ATOM	2762	CA	LYS	D	147	50.617	25.364	133.524	1.00	0.00
	ATOM	2763	C	LYS	D	147	51.804	24.427	133.310	1.00	0.00

		ATOM 2764	O	LYS D 147	52.912	24.767	133.725	1.00	0.00
		ATOM 2765	CB	LYS D 147	50.462	26.355	132.359	1.00	0.00
		ATOM 2766	CG	LYS D 147	51.732	27.181	132.098	1.00	0.00
		ATOM 2767	CD	LYS D 147	51.481	28.403	131.206	1.00	0.00
5		ATOM 2768	CE	LYS D 147	50.975	28.017	129.813	1.00	0.00
		ATOM 2769	NZ	LYS D 147	50.859	29.198	128.938	1.00	0.00
		ATOM 2770	N	CYS D 148	51.583	23.260	132.689	1.00	0.00
		ATOM 2771	CA	CYS D 148	52.607	22.226	132.565	1.00	0.00
		ATOM 2772	C	CYS D 148	52.681	21.659	131.154	1.00	0.00
10		ATOM 2773	O	CYS D 148	51.710	21.712	130.411	1.00	0.00
		ATOM 2774	CB	CYS D 148	52.343	21.110	133.584	1.00	0.00
		ATOM 2775	SG	CYS D 148	52.104	21.643	135.301	1.00	0.00
		ATOM 2776	N	GLU D 149	53.845	21.107	130.805	1.00	0.00
		ATOM 2777	CA	GLU D 149	54.104	20.365	129.585	1.00	0.00
15		ATOM 2778	C	GLU D 149	54.432	18.935	129.980	1.00	0.00
		ATOM 2779	O	GLU D 149	55.235	18.731	130.886	1.00	0.00
		ATOM 2780	CB	GLU D 149	55.323	20.946	128.868	1.00	0.00
		ATOM 2781	CG	GLU D 149	55.018	22.289	128.205	1.00	0.00
		ATOM 2782	CD	GLU D 149	56.256	22.900	127.556	1.00	0.00
20		ATOM 2783	OE1	GLU D 149	56.105	23.979	126.948	1.00	0.00
		ATOM 2784	OE2	GLU D 149	57.342	22.295	127.695	1.00	0.00
		ATOM 2785	N	LEU D 150	53.841	17.970	129.276	1.00	0.00
		ATOM 2786	CA	LEU D 150	54.160	16.553	129.361	1.00	0.00
		ATOM 2787	C	LEU D 150	54.933	16.227	128.087	1.00	0.00
25		ATOM 2788	O	LEU D 150	54.522	16.661	127.013	1.00	0.00

	ATOM	2789	CB	LEU	D	150	52.836	15.782	129.457	1.00	0.00
	ATOM	2790	CG	LEU	D	150	52.902	14.251	129.512	1.00	0.00
	ATOM	2791	CD1	LEU	D	150	53.514	13.774	130.831	1.00	0.00
	ATOM	2792	CD2	LEU	D	150	51.471	13.706	129.411	1.00	0.00
5	ATOM	2793	N	ARG	D	151	56.046	15.496	128.184	1.00	0.00
	ATOM	2794	CA	ARG	D	151	56.760	15.001	127.020	1.00	0.00
	ATOM	2795	C	ARG	D	151	56.908	13.494	127.141	1.00	0.00
	ATOM	2796	O	ARG	D	151	57.207	12.986	128.220	1.00	0.00
	ATOM	2797	CB	ARG	D	151	58.085	15.741	126.793	1.00	0.00
10	ATOM	2798	CG	ARG	D	151	59.239	15.345	127.717	1.00	0.00
	ATOM	2799	CD	ARG	D	151	60.476	16.139	127.290	1.00	0.00
	ATOM	2800	NE	ARG	D	151	61.655	15.809	128.100	1.00	0.00
	ATOM	2801	CZ	ARG	D	151	62.830	16.449	127.996	1.00	0.00
	ATOM	2802	NH1	ARG	D	151	62.989	17.432	127.100	1.00	0.00
15	ATOM	2803	NH2	ARG	D	151	63.845	16.093	128.789	1.00	0.00
	ATOM	2804	N	HIS	D	152	56.654	12.790	126.037	1.00	0.00
	ATOM	2805	CA	HIS	D	152	56.688	11.344	125.966	1.00	0.00
	ATOM	2806	C	HIS	D	152	57.440	10.939	124.704	1.00	0.00
	ATOM	2807	O	HIS	D	152	57.366	11.631	123.688	1.00	0.00
20	ATOM	2808	CB	HIS	D	152	55.266	10.772	126.011	1.00	0.00
	ATOM	2809	CG	HIS	D	152	54.378	11.206	124.872	1.00	0.00
	ATOM	2810	ND1	HIS	D	152	53.831	12.478	124.791	1.00	0.00
	ATOM	2811	CD2	HIS	D	152	53.921	10.544	123.758	1.00	0.00
	ATOM	2812	CE1	HIS	D	152	53.098	12.527	123.665	1.00	0.00
25	ATOM	2813	NE2	HIS	D	152	53.109	11.374	122.992	1.00	0.00

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	ATOM 2814	N	LYS	D	153	58.174	9.826	124.774	1.00	0.00
	ATOM 2815	CA	LYS	D	153	58.778	9.209	123.606	1.00	0.00
	ATOM 2816	C	LYS	D	153	58.773	7.697	123.806	1.00	0.00
	ATOM 2817	O	LYS	D	153	58.932	7.243	124.942	1.00	0.00
5	ATOM 2818	CB	LYS	D	153	60.200	9.745	123.365	1.00	0.00
	ATOM 2819	CG	LYS	D	153	61.227	9.280	124.406	1.00	0.00
	ATOM 2820	CD	LYS	D	153	62.614	9.832	124.063	1.00	0.00
	ATOM 2821	CE	LYS	D	153	63.654	9.305	125.058	1.00	0.00
	ATOM 2822	NZ	LYS	D	153	65.023	9.707	124.683	1.00	0.00
10	ATOM 2823	N	PRO	D	154	58.627	6.909	122.729	1.00	0.00
	ATOM 2824	CA	PRO	D	154	58.879	5.482	122.787	1.00	0.00
	ATOM 2825	C	PRO	D	154	60.367	5.310	123.078	1.00	0.00
	ATOM 2826	O	PRO	D	154	61.180	6.100	122.597	1.00	0.00
	ATOM 2827	CB	PRO	D	154	58.510	4.950	121.403	1.00	0.00
15	ATOM 2828	CG	PRO	D	154	58.778	6.137	120.481	1.00	0.00
	ATOM 2829	CD	PRO	D	154	58.456	7.349	121.352	1.00	0.00
	ATOM 2830	N	GLN	D	155	60.742	4.319	123.888	1.00	0.00
	ATOM 2831	CA	GLN	D	155	62.136	4.176	124.271	1.00	0.00
	ATOM 2832	C	GLN	D	155	62.916	3.475	123.156	1.00	0.00
20	ATOM 2833	O	GLN	D	155	63.204	2.283	123.237	1.00	0.00
	ATOM 2834	CB	GLN	D	155	62.225	3.489	125.633	1.00	0.00
	ATOM 2835	CG	GLN	D	155	63.633	3.635	126.227	1.00	0.00
	ATOM 2836	CD	GLN	D	155	63.669	3.265	127.706	1.00	0.00
	ATOM 2837	OE1	GLN	D	155	64.421	3.859	128.473	1.00	0.00
25	ATOM 2838	NE2	GLN	D	155	62.855	2.293	128.113	1.00	0.00

	ATOM	2839	N	ARG	D	156	63.247	4.241	122.111	1.00	0.00
	ATOM	2840	CA	ARG	D	156	64.022	3.812	120.956	1.00	0.00
	ATOM	2841	C	ARG	D	156	65.271	4.687	120.815	1.00	0.00
	ATOM	2842	O	ARG	D	156	65.358	5.754	121.423	1.00	0.00
5	ATOM	2843	CB	ARG	D	156	63.138	3.862	119.699	1.00	0.00
	ATOM	2844	CG	ARG	D	156	62.739	5.295	119.317	1.00	0.00
	ATOM	2845	CD	ARG	D	156	61.873	5.315	118.054	1.00	0.00
	ATOM	2846	NE	ARG	D	156	61.700	6.692	117.564	1.00	0.00
	ATOM	2847	CZ	ARG	D	156	61.308	7.016	116.320	1.00	0.00
10	ATOM	2848	NH1	ARG	D	156	60.869	6.073	115.476	1.00	0.00
	ATOM	2849	NH2	ARG	D	156	61.373	8.288	115.912	1.00	0.00
	ATOM	2850	N	GLY	D	157	66.226	4.242	119.989	1.00	0.00
	ATOM	2851	CA	GLY	D	157	67.453	4.974	119.702	1.00	0.00
	ATOM	2852	C	GLY	D	157	67.164	6.339	119.075	1.00	0.00
15	ATOM	2853	O	GLY	D	157	67.774	7.338	119.452	1.00	0.00
	ATOM	2854	N	GLU	D	158	66.224	6.374	118.124	1.00	0.00
	ATOM	2855	CA	GLU	D	158	65.748	7.586	117.475	1.00	0.00
	ATOM	2856	C	GLU	D	158	64.998	8.460	118.488	1.00	0.00
	ATOM	2857	O	GLU	D	158	63.770	8.402	118.583	1.00	0.00
20	ATOM	2858	CB	GLU	D	158	64.821	7.198	116.320	1.00	0.00
	ATOM	2859	CG	GLU	D	158	65.484	6.390	115.203	1.00	0.00
	ATOM	2860	CD	GLU	D	158	64.417	5.943	114.208	1.00	0.00
	ATOM	2861	OE1	GLU	D	158	63.551	5.146	114.633	1.00	0.00
	ATOM	2862	OE2	GLU	D	158	64.457	6.436	113.062	1.00	0.00
25	ATOM	2863	N	ALA	D	159	65.748	9.263	119.248	1.00	0.00

	ATOM 2864	CA	ALA	D	159	65.227	10.161	120.266	1.00	0.00
	ATOM 2865	C	ALA	D	159	64.264	11.180	119.650	1.00	0.00
	ATOM 2866	O	ALA	D	159	64.702	12.127	119.001	1.00	0.00
	ATOM 2867	CB	ALA	D	159	66.399	10.861	120.962	1.00	0.00
5	ATOM 2868	N	SER	D	160	62.956	10.987	119.856	1.00	0.00
	ATOM 2869	CA	SER	D	160	61.911	11.828	119.289	1.00	0.00
	ATOM 2870	C	SER	D	160	60.915	12.216	120.380	1.00	0.00
	ATOM 2871	O	SER	D	160	59.948	11.495	120.619	1.00	0.00
	ATOM 2872	CB	SER	D	160	61.226	11.079	118.140	1.00	0.00
10	ATOM 2873	OG	SER	D	160	62.184	10.683	117.178	1.00	0.00
	ATOM 2874	N	TRP	D	161	61.151	13.355	121.040	1.00	0.00
	ATOM 2875	CA	TRP	D	161	60.232	13.885	122.035	1.00	0.00
	ATOM 2876	C	TRP	D	161	58.945	14.384	121.377	1.00	0.00
	ATOM 2877	O	TRP	D	161	58.990	15.302	120.561	1.00	0.00
15	ATOM 2878	CB	TRP	D	161	60.898	15.004	122.850	1.00	0.00
	ATOM 2879	CG	TRP	D	161	61.814	14.541	123.941	1.00	0.00
	ATOM 2880	CD1	TRP	D	161	63.093	14.932	124.139	1.00	0.00
	ATOM 2881	CD2	TRP	D	161	61.513	13.607	125.018	1.00	0.00
	ATOM 2882	NE1	TRP	D	161	63.612	14.297	125.250	1.00	0.00
20	ATOM 2883	CE2	TRP	D	161	62.677	13.462	125.827	1.00	0.00
	ATOM 2884	CE3	TRP	D	161	60.366	12.882	125.405	1.00	0.00
	ATOM 2885	CZ2	TRP	D	161	62.707	12.622	126.948	1.00	0.00
	ATOM 2886	CZ3	TRP	D	161	60.388	12.031	126.521	1.00	0.00
	ATOM 2887	CH2	TRP	D	161	61.555	11.901	127.291	1.00	0.00
25	ATOM 2888	N	ALA	D	162	57.806	13.795	121.764	1.00	0.00

TOTAL: 21.1400

	ATOM 2889	CA	ALA D 162	56.471	14.269	121.430	1.00	0.00
	ATOM 2890	C	ALA D 162	55.901	14.975	122.661	1.00	0.00
	ATOM 2891	O	ALA D 162	55.929	14.412	123.754	1.00	0.00
	ATOM 2892	CB	ALA D 162	55.595	13.083	121.018	1.00	0.00
5	ATOM 2893	N	LEU D 163	55.423	16.213	122.490	1.00	0.00
	ATOM 2894	CA	LEU D 163	55.005	17.096	123.573	1.00	0.00
	ATOM 2895	C	LEU D 163	53.491	17.305	123.589	1.00	0.00
	ATOM 2896	O	LEU D 163	52.849	17.335	122.541	1.00	0.00
	ATOM 2897	CB	LEU D 163	55.742	18.442	123.435	1.00	0.00
10	ATOM 2898	CG	LEU D 163	56.877	18.594	124.463	1.00	0.00
	ATOM 2899	CD1	LEU D 163	58.196	18.995	123.799	1.00	0.00
	ATOM 2900	CD2	LEU D 163	56.477	19.644	125.501	1.00	0.00
	ATOM 2901	N	VAL D 164	52.941	17.476	124.796	1.00	0.00
	ATOM 2902	CA	VAL D 164	51.573	17.899	125.047	1.00	0.00
15	ATOM 2903	C	VAL D 164	51.669	19.254	125.745	1.00	0.00
	ATOM 2904	O	VAL D 164	52.473	19.407	126.666	1.00	0.00
	ATOM 2905	CB	VAL D 164	50.839	16.867	125.917	1.00	0.00
	ATOM 2906	CG1	VAL D 164	49.372	17.265	126.120	1.00	0.00
	ATOM 2907	CG2	VAL D 164	50.908	15.461	125.307	1.00	0.00
20	ATOM 2908	N	GLY D 165	50.886	20.227	125.261	1.00	0.00
	ATOM 2909	CA	GLY D 165	50.973	21.633	125.629	1.00	0.00
	ATOM 2910	C	GLY D 165	50.455	21.909	127.046	1.00	0.00
	ATOM 2911	O	GLY D 165	50.692	21.099	127.935	1.00	0.00
	ATOM 2912	N	PRO D 166	49.780	23.051	127.283	1.00	0.00
25	ATOM 2913	CA	PRO D 166	49.545	23.592	128.618	1.00	0.00

	ATOM	2914	C	PRO	D	166	48.524	22.770	129.410	1.00	0.00
	ATOM	2915	O	PRO	D	166	47.358	23.142	129.529	1.00	0.00
	ATOM	2916	CB	PRO	D	166	49.111	25.045	128.396	1.00	0.00
	ATOM	2917	CG	PRO	D	166	48.442	25.000	127.025	1.00	0.00
5	ATOM	2918	CD	PRO	D	166	49.304	23.985	126.275	1.00	0.00
	ATOM	2919	N	LEU	D	167	48.993	21.660	129.981	1.00	0.00
	ATOM	2920	CA	LEU	D	167	48.253	20.799	130.881	1.00	0.00
	ATOM	2921	C	LEU	D	167	48.067	21.485	132.232	1.00	0.00
	ATOM	2922	O	LEU	D	167	48.865	22.346	132.611	1.00	0.00
10	ATOM	2923	CB	LEU	D	167	49.022	19.485	131.076	1.00	0.00
	ATOM	2924	CG	LEU	D	167	48.909	18.550	129.865	1.00	0.00
	ATOM	2925	CD1	LEU	D	167	50.007	17.492	129.972	1.00	0.00
	ATOM	2926	CD2	LEU	D	167	47.540	17.859	129.784	1.00	0.00
	ATOM	2927	N	PRO	D	168	47.022	21.088	132.972	1.00	0.00
15	ATOM	2928	CA	PRO	D	168	46.750	21.594	134.300	1.00	0.00
	ATOM	2929	C	PRO	D	168	47.787	21.091	135.298	1.00	0.00
	ATOM	2930	O	PRO	D	168	48.478	20.093	135.078	1.00	0.00
	ATOM	2931	CB	PRO	D	168	45.358	21.072	134.658	1.00	0.00
	ATOM	2932	CG	PRO	D	168	45.277	19.762	133.877	1.00	0.00
20	ATOM	2933	CD	PRO	D	168	46.030	20.095	132.593	1.00	0.00
	ATOM	2934	N	LEU	D	169	47.858	21.807	136.416	1.00	0.00
	ATOM	2935	CA	LEU	D	169	48.813	21.565	137.473	1.00	0.00
	ATOM	2936	C	LEU	D	169	48.612	20.211	138.149	1.00	0.00
	ATOM	2937	O	LEU	D	169	49.585	19.591	138.572	1.00	0.00
25	ATOM	2938	CB	LEU	D	169	48.695	22.715	138.471	1.00	0.00

5	ATOM	2939	CG	LEU	D	169	49.702	22.590	139.611	1.00	0.00
	ATOM	2940	CD1	LEU	D	169	51.132	22.396	139.060	1.00	0.00
	ATOM	2941	CD2	LEU	D	169	49.531	23.809	140.526	1.00	0.00
	ATOM	2942	N	GLU	D	170	47.360	19.764	138.261	1.00	0.00
	ATOM	2943	CA	GLU	D	170	47.007	18.458	138.787	1.00	0.00
	ATOM	2944	C	GLU	D	170	46.200	17.698	137.740	1.00	0.00
	ATOM	2945	O	GLU	D	170	45.563	18.305	136.880	1.00	0.00
	ATOM	2946	CB	GLU	D	170	46.232	18.608	140.103	1.00	0.00
10	ATOM	2947	CG	GLU	D	170	44.949	19.438	139.958	1.00	0.00
	ATOM	2948	CD	GLU	D	170	44.184	19.475	141.275	1.00	0.00
	ATOM	2949	OE1	GLU	D	170	44.377	20.462	142.018	1.00	0.00
	ATOM	2950	OE2	GLU	D	170	43.426	18.510	141.516	1.00	0.00
15	ATOM	2951	N	ALA	D	171	46.213	16.368	137.831	1.00	0.00
	ATOM	2952	CA	ALA	D	171	45.321	15.506	137.077	1.00	0.00
	ATOM	2953	C	ALA	D	171	45.070	14.260	137.911	1.00	0.00
	ATOM	2954	O	ALA	D	171	46.021	13.579	138.285	1.00	0.00
	ATOM	2955	CB	ALA	D	171	45.933	15.142	135.724	1.00	0.00
	ATOM	2956	N	LEU	D	172	43.797	13.978	138.207	1.00	0.00
	ATOM	2957	CA	LEU	D	172	43.385	12.807	138.967	1.00	0.00
	ATOM	2958	C	LEU	D	172	43.551	11.552	138.107	1.00	0.00
20	ATOM	2959	O	LEU	D	172	43.988	10.518	138.607	1.00	0.00
	ATOM	2960	CB	LEU	D	172	41.927	12.959	139.429	1.00	0.00
	ATOM	2961	CG	LEU	D	172	41.747	13.889	140.642	1.00	0.00
	ATOM	2962	CD1	LEU	D	172	42.153	15.343	140.366	1.00	0.00
25	ATOM	2963	CD2	LEU	D	172	40.277	13.857	141.075	1.00	0.00

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	ATOM 2964	N	GLN D 173	43.198	11.649	136.819	1.00	0.00
	ATOM 2965	CA	GLN D 173	43.362	10.589	135.840	1.00	0.00
	ATOM 2966	C	GLN D 173	43.362	11.202	134.441	1.00	0.00
	ATOM 2967	O	GLN D 173	42.416	11.894	134.073	1.00	0.00
5	ATOM 2968	CB	GLN D 173	42.279	9.522	136.016	1.00	0.00
	ATOM 2969	CG	GLN D 173	40.841	10.023	135.864	1.00	0.00
	ATOM 2970	CD	GLN D 173	39.868	8.981	136.404	1.00	0.00
	ATOM 2971	OE1	GLN D 173	39.591	7.984	135.744	1.00	0.00
	ATOM 2972	NE2	GLN D 173	39.351	9.199	137.614	1.00	0.00
10	ATOM 2973	N	TYR D 174	44.434	10.976	133.678	1.00	0.00
	ATOM 2974	CA	TYR D 174	44.610	11.486	132.330	1.00	0.00
	ATOM 2975	C	TYR D 174	44.988	10.313	131.432	1.00	0.00
	ATOM 2976	O	TYR D 174	46.056	9.727	131.604	1.00	0.00
	ATOM 2977	CB	TYR D 174	45.697	12.565	132.329	1.00	0.00
15	ATOM 2978	CG	TYR D 174	45.958	13.171	130.964	1.00	0.00
	ATOM 2979	CD1	TYR D 174	45.228	14.297	130.542	1.00	0.00
	ATOM 2980	CD2	TYR D 174	46.927	12.608	130.112	1.00	0.00
	ATOM 2981	CE1	TYR D 174	45.470	14.862	129.278	1.00	0.00
	ATOM 2982	CE2	TYR D 174	47.175	13.179	128.852	1.00	0.00
20	ATOM 2983	CZ	TYR D 174	46.442	14.301	128.432	1.00	0.00
	ATOM 2984	OH	TYR D 174	46.683	14.847	127.206	1.00	0.00
	ATOM 2985	N	GLU D 175	44.110	9.969	130.485	1.00	0.00
	ATOM 2986	CA	GLU D 175	44.370	8.913	129.524	1.00	0.00
	ATOM 2987	C	GLU D 175	45.163	9.494	128.353	1.00	0.00
25	ATOM 2988	O	GLU D 175	44.691	10.401	127.669	1.00	0.00

	ATOM 2989	CB	GLU	D	175	43.052	8.270	129.080	1.00	0.00
	ATOM 2990	CG	GLU	D	175	43.309	7.009	128.241	1.00	0.00
	ATOM 2991	CD	GLU	D	175	42.024	6.241	127.945	1.00	0.00
	ATOM 2992	OE1	GLU	D	175	42.137	5.013	127.742	1.00	0.00
5	ATOM 2993	OE2	GLU	D	175	40.955	6.890	127.937	1.00	0.00
	ATOM 2994	N	LEU	D	176	46.372	8.970	128.141	1.00	0.00
	ATOM 2995	CA	LEU	D	176	47.245	9.280	127.018	1.00	0.00
	ATOM 2996	C	LEU	D	176	47.223	8.059	126.101	1.00	0.00
	ATOM 2997	O	LEU	D	176	47.206	6.932	126.598	1.00	0.00
10	ATOM 2998	CB	LEU	D	176	48.654	9.544	127.569	1.00	0.00
	ATOM 2999	CG	LEU	D	176	49.736	9.773	126.501	1.00	0.00
	ATOM 3000	CD1	LEU	D	176	49.583	11.120	125.789	1.00	0.00
	ATOM 3001	CD2	LEU	D	176	51.114	9.701	127.168	1.00	0.00
	ATOM 3002	N	CYS	D	177	47.213	8.251	124.775	1.00	0.00
15	ATOM 3003	CA	CYS	D	177	47.122	7.119	123.861	1.00	0.00
	ATOM 3004	C	CYS	D	177	47.761	7.404	122.500	1.00	0.00
	ATOM 3005	O	CYS	D	177	48.238	8.511	122.252	1.00	0.00
	ATOM 3006	CB	CYS	D	177	45.666	6.643	123.764	1.00	0.00
	ATOM 3007	SG	CYS	D	177	45.532	4.872	123.428	1.00	0.00
20	ATOM 3008	N	GLY	D	178	47.815	6.376	121.644	1.00	0.00
	ATOM 3009	CA	GLY	D	178	48.558	6.351	120.394	1.00	0.00
	ATOM 3010	C	GLY	D	178	49.923	5.693	120.607	1.00	0.00
	ATOM 3011	O	GLY	D	178	50.849	5.931	119.835	1.00	0.00
	ATOM 3012	N	LEU	D	179	50.055	4.880	121.663	1.00	0.00
25	ATOM 3013	CA	LEU	D	179	51.329	4.396	122.160	1.00	0.00

5	ATOM	3014	C	LEU	D	179	51.440	2.895	121.875	1.00	0.00
	ATOM	3015	O	LEU	D	179	50.947	2.101	122.667	1.00	0.00
	ATOM	3016	CB	LEU	D	179	51.399	4.671	123.676	1.00	0.00
	ATOM	3017	CG	LEU	D	179	50.965	6.078	124.114	1.00	0.00
	ATOM	3018	CD1	LEU	D	179	50.853	6.065	125.640	1.00	0.00
	ATOM	3019	CD2	LEU	D	179	51.946	7.158	123.652	1.00	0.00
	ATOM	3020	N	LEU	D	180	52.060	2.470	120.765	1.00	0.00
	ATOM	3021	CA	LEU	D	180	52.271	1.037	120.521	1.00	0.00
10	ATOM	3022	C	LEU	D	180	53.475	0.587	119.657	1.00	0.00
	ATOM	3023	O	LEU	D	180	53.712	-0.619	119.614	1.00	0.00
	ATOM	3024	CB	LEU	D	180	50.943	0.403	120.049	1.00	0.00
	ATOM	3025	CG	LEU	D	180	50.788	-1.115	120.284	1.00	0.00
	ATOM	3026	CD1	LEU	D	180	51.075	-1.542	121.731	1.00	0.00
	ATOM	3027	CD2	LEU	D	180	49.347	-1.520	119.948	1.00	0.00
15	ATOM	3028	N	PRO	D	181	54.277	1.435	118.977	1.00	0.00
	ATOM	3029	CA	PRO	D	181	55.410	0.949	118.194	1.00	0.00
	ATOM	3030	C	PRO	D	181	56.513	0.378	119.092	1.00	0.00
	ATOM	3031	O	PRO	D	181	57.144	-0.611	118.726	1.00	0.00
20	ATOM	3032	CB	PRO	D	181	55.899	2.144	117.372	1.00	0.00
	ATOM	3033	CG	PRO	D	181	55.539	3.336	118.251	1.00	0.00
	ATOM	3034	CD	PRO	D	181	54.245	2.884	118.929	1.00	0.00
	ATOM	3035	N	ALA	D	182	56.729	0.984	120.267	1.00	0.00
	ATOM	3036	CA	ALA	D	182	57.522	0.415	121.350	1.00	0.00
	ATOM	3037	C	ALA	D	182	56.566	0.079	122.493	1.00	0.00
25	ATOM	3038	O	ALA	D	182	55.521	0.714	122.620	1.00	0.00

5	ATOM	3039	CB	ALA	D	182	58.576	1.424	121.812	1.00	0.00
	ATOM	3040	N	THR	D	183	56.903	-0.900	123.337	1.00	0.00
	ATOM	3041	CA	THR	D	183	56.113	-1.181	124.529	1.00	0.00
	ATOM	3042	C	THR	D	183	56.418	-0.119	125.590	1.00	0.00
	ATOM	3043	O	THR	D	183	55.508	0.505	126.137	1.00	0.00
	ATOM	3044	CB	THR	D	183	56.403	-2.601	125.041	1.00	0.00
	ATOM	3045	OG1	THR	D	183	56.332	-3.528	123.977	1.00	0.00
	ATOM	3046	CG2	THR	D	183	55.401	-2.997	126.130	1.00	0.00
10	ATOM	3047	N	ALA	D	184	57.713	0.071	125.874	1.00	0.00
	ATOM	3048	CA	ALA	D	184	58.208	0.996	126.879	1.00	0.00
	ATOM	3049	C	ALA	D	184	58.237	2.425	126.334	1.00	0.00
	ATOM	3050	O	ALA	D	184	58.715	2.663	125.224	1.00	0.00
15	ATOM	3051	CB	ALA	D	184	59.607	0.563	127.325	1.00	0.00
	ATOM	3052	N	TYR	D	185	57.742	3.368	127.140	1.00	0.00
	ATOM	3053	CA	TYR	D	185	57.741	4.796	126.876	1.00	0.00
	ATOM	3054	C	TYR	D	185	58.381	5.519	128.052	1.00	0.00
	ATOM	3055	O	TYR	D	185	58.034	5.227	129.191	1.00	0.00
	ATOM	3056	CB	TYR	D	185	56.298	5.286	126.718	1.00	0.00
20	ATOM	3057	CG	TYR	D	185	55.799	5.232	125.295	1.00	0.00
	ATOM	3058	CD1	TYR	D	185	55.355	4.020	124.734	1.00	0.00
	ATOM	3059	CD2	TYR	D	185	55.840	6.398	124.512	1.00	0.00
	ATOM	3060	CE1	TYR	D	185	54.969	3.979	123.384	1.00	0.00
	ATOM	3061	CE2	TYR	D	185	55.465	6.353	123.164	1.00	0.00
	ATOM	3062	CZ	TYR	D	185	55.026	5.145	122.603	1.00	0.00
25	ATOM	3063	OH	TYR	D	185	54.662	5.118	121.294	1.00	0.00

		ATOM	3064	N	THR	D	186	59.259	6.489	127.776	1.00	0.00
		ATOM	3065	CA	THR	D	186	59.764	7.422	128.775	1.00	0.00
		ATOM	3066	C	THR	D	186	58.829	8.625	128.811	1.00	0.00
		ATOM	3067	O	THR	D	186	58.553	9.193	127.755	1.00	0.00
5		ATOM	3068	CB	THR	D	186	61.177	7.896	128.405	1.00	0.00
		ATOM	3069	OG1	THR	D	186	62.033	6.790	128.208	1.00	0.00
		ATOM	3070	CG2	THR	D	186	61.748	8.776	129.522	1.00	0.00
		ATOM	3071	N	LEU	D	187	58.373	9.028	130.003	1.00	0.00
		ATOM	3072	CA	LEU	D	187	57.565	10.223	130.193	1.00	0.00
10		ATOM	3073	C	LEU	D	187	58.245	11.148	131.202	1.00	0.00
		ATOM	3074	O	LEU	D	187	58.781	10.681	132.207	1.00	0.00
		ATOM	3075	CB	LEU	D	187	56.147	9.865	130.657	1.00	0.00
		ATOM	3076	CG	LEU	D	187	55.363	9.010	129.645	1.00	0.00
		ATOM	3077	CD1	LEU	D	187	55.565	7.508	129.881	1.00	0.00
15		ATOM	3078	CD2	LEU	D	187	53.869	9.314	129.778	1.00	0.00
		ATOM	3079	N	GLN	D	188	58.221	12.458	130.933	1.00	0.00
		ATOM	3080	CA	GLN	D	188	58.610	13.496	131.878	1.00	0.00
		ATOM	3081	C	GLN	D	188	57.582	14.618	131.790	1.00	0.00
		ATOM	3082	O	GLN	D	188	56.909	14.755	130.774	1.00	0.00
20		ATOM	3083	CB	GLN	D	188	60.001	14.056	131.558	1.00	0.00
		ATOM	3084	CG	GLN	D	188	61.107	13.001	131.572	1.00	0.00
		ATOM	3085	CD	GLN	D	188	62.450	13.636	131.226	1.00	0.00
		ATOM	3086	OE1	GLN	D	188	62.752	13.857	130.054	1.00	0.00
		ATOM	3087	NE2	GLN	D	188	63.255	13.962	132.235	1.00	0.00
25		ATOM	3088	N	ILE	D	189	57.470	15.434	132.835	1.00	0.00

		ATOM 3089	CA	ILE	D	189	56.557	16.563	132.884	1.00	0.00
		ATOM 3090	C	ILE	D	189	57.284	17.730	133.545	1.00	0.00
		ATOM 3091	O	ILE	D	189	58.251	17.521	134.276	1.00	0.00
		ATOM 3092	CB	ILE	D	189	55.263	16.151	133.613	1.00	0.00
5		ATOM 3093	CG1	ILE	D	189	54.197	17.264	133.653	1.00	0.00
		ATOM 3094	CG2	ILE	D	189	55.631	15.642	135.006	1.00	0.00
		ATOM 3095	CD1	ILE	D	189	52.832	16.802	134.180	1.00	0.00
		ATOM 3096	N	ARG	D	190	56.845	18.961	133.283	1.00	0.00
		ATOM 3097	CA	ARG	D	190	57.449	20.143	133.872	1.00	0.00
10		ATOM 3098	C	ARG	D	190	56.426	21.271	133.879	1.00	0.00
		ATOM 3099	O	ARG	D	190	55.482	21.224	133.098	1.00	0.00
		ATOM 3100	CB	ARG	D	190	58.793	20.427	133.176	1.00	0.00
		ATOM 3101	CG	ARG	D	190	59.065	21.811	132.580	1.00	0.00
		ATOM 3102	CD	ARG	D	190	58.911	21.919	131.053	1.00	0.00
15		ATOM 3103	NE	ARG	D	190	60.178	22.414	130.490	1.00	0.00
		ATOM 3104	CZ	ARG	D	190	60.361	23.329	129.526	1.00	0.00
		ATOM 3105	NH1	ARG	D	190	59.392	23.660	128.671	1.00	0.00
		ATOM 3106	NH2	ARG	D	190	61.559	23.917	129.424	1.00	0.00
		ATOM 3107	N	CYS	D	191	56.568	22.235	134.798	1.00	0.00
20		ATOM 3108	CA	CYS	D	191	55.546	23.237	135.080	1.00	0.00
		ATOM 3109	C	CYS	D	191	56.153	24.625	135.230	1.00	0.00
		ATOM 3110	O	CYS	D	191	57.348	24.763	135.482	1.00	0.00
		ATOM 3111	CB	CYS	D	191	54.780	22.858	136.349	1.00	0.00
		ATOM 3112	SG	CYS	D	191	53.872	21.292	136.305	1.00	0.00
25		ATOM 3113	N	ILE	D	192	55.317	25.655	135.078	1.00	0.00

		ATOM 3114	CA	ILE	D	192	55.695	27.050	135.244	1.00	0.00
		ATOM 3115	C	ILE	D	192	54.485	27.818	135.765	1.00	0.00
		ATOM 3116	O	ILE	D	192	53.350	27.401	135.534	1.00	0.00
		ATOM 3117	CB	ILE	D	192	56.212	27.614	133.909	1.00	0.00
5		ATOM 3118	CG1	ILE	D	192	56.891	28.980	134.081	1.00	0.00
		ATOM 3119	CG2	ILE	D	192	55.108	27.689	132.845	1.00	0.00
		ATOM 3120	CD1	ILE	D	192	57.675	29.363	132.823	1.00	0.00
		ATOM 3121	N	ARG	D	193	54.724	28.937	136.460	1.00	0.00
		ATOM 3122	CA	ARG	D	193	53.662	29.819	136.923	1.00	0.00
10		ATOM 3123	C	ARG	D	193	52.822	30.276	135.724	1.00	0.00
		ATOM 3124	O	ARG	D	193	53.380	30.674	134.704	1.00	0.00
		ATOM 3125	CB	ARG	D	193	54.268	30.995	137.706	1.00	0.00
		ATOM 3126	CG	ARG	D	193	53.158	31.838	138.348	1.00	0.00
		ATOM 3127	CD	ARG	D	193	53.618	32.616	139.589	1.00	0.00
15		ATOM 3128	NE	ARG	D	193	54.468	33.764	139.253	1.00	0.00
		ATOM 3129	CZ	ARG	D	193	54.479	34.950	139.887	1.00	0.00
		ATOM 3130	NH1	ARG	D	193	53.763	35.173	140.997	1.00	0.00
		ATOM 3131	NH2	ARG	D	193	55.223	35.923	139.368	1.00	0.00
		ATOM 3132	N	TRP	D	194	51.489	30.163	135.820	1.00	0.00
20		ATOM 3133	CA	TRP	D	194	50.606	30.334	134.672	1.00	0.00
		ATOM 3134	C	TRP	D	194	50.591	31.782	134.166	1.00	0.00
		ATOM 3135	O	TRP	D	194	50.958	32.003	133.012	1.00	0.00
		ATOM 3136	CB	TRP	D	194	49.200	29.750	134.934	1.00	0.00
		ATOM 3137	CG	TRP	D	194	48.352	29.401	133.743	1.00	0.00
25		ATOM 3138	CD1	TRP	D	194	48.217	30.121	132.605	1.00	0.00

	ATOM 3139	CD2	TRP	D	194	47.468	28.249	133.576	1.00	0.00
	ATOM 3140	NE1	TRP	D	194	47.371	29.474	131.728	1.00	0.00
	ATOM 3141	CE2	TRP	D	194	46.884	28.306	132.277	1.00	0.00
	ATOM 3142	CE3	TRP	D	194	47.103	27.156	134.389	1.00	0.00
5	ATOM 3143	CZ2	TRP	D	194	46.007	27.318	131.803	1.00	0.00
	ATOM 3144	CZ3	TRP	D	194	46.235	26.152	133.922	1.00	0.00
	ATOM 3145	CH2	TRP	D	194	45.691	26.228	132.629	1.00	0.00
	ATOM 3146	N	PRO	D	195	50.141	32.775	134.957	1.00	0.00
	ATOM 3147	CA	PRO	D	195	49.751	34.074	134.426	1.00	0.00
10	ATOM 3148	C	PRO	D	195	50.845	35.138	134.585	1.00	0.00
	ATOM 3149	O	PRO	D	195	50.664	36.259	134.116	1.00	0.00
	ATOM 3150	CB	PRO	D	195	48.497	34.464	135.227	1.00	0.00
	ATOM 3151	CG	PRO	D	195	48.419	33.479	136.403	1.00	0.00
	ATOM 3152	CD	PRO	D	195	49.740	32.718	136.354	1.00	0.00
15	ATOM 3153	N	LEU	D	196	51.934	34.824	135.302	1.00	0.00
	ATOM 3154	CA	LEU	D	196	52.840	35.805	135.888	1.00	0.00
	ATOM 3155	C	LEU	D	196	54.280	35.289	135.734	1.00	0.00
	ATOM 3156	O	LEU	D	196	54.461	34.095	135.491	1.00	0.00
	ATOM 3157	CB	LEU	D	196	52.480	35.959	137.376	1.00	0.00
20	ATOM 3158	CG	LEU	D	196	51.015	36.316	137.686	1.00	0.00
	ATOM 3159	CD1	LEU	D	196	50.706	35.967	139.146	1.00	0.00
	ATOM 3160	CD2	LEU	D	196	50.726	37.796	137.419	1.00	0.00
	ATOM 3161	N	PRO	D	197	55.311	36.144	135.877	1.00	0.00
	ATOM 3162	CA	PRO	D	197	56.703	35.763	135.662	1.00	0.00
25	ATOM 3163	C	PRO	D	197	57.148	34.576	136.517	1.00	0.00

	ATOM 3164	O	PRO	D	197	56.701	34.419	137.652	1.00	0.00
	ATOM 3165	CB	PRO	D	197	57.534	36.997	136.011	1.00	0.00
	ATOM 3166	CG	PRO	D	197	56.575	38.157	135.770	1.00	0.00
	ATOM 3167	CD	PRO	D	197	55.218	37.571	136.154	1.00	0.00
5	ATOM 3168	N	GLY	D	198	58.043	33.749	135.976	1.00	0.00
	ATOM 3169	CA	GLY	D	198	58.591	32.612	136.691	1.00	0.00
	ATOM 3170	C	GLY	D	198	59.409	31.746	135.745	1.00	0.00
	ATOM 3171	O	GLY	D	198	59.282	31.858	134.528	1.00	0.00
	ATOM 3172	N	HIS	D	199	60.249	30.884	136.320	1.00	0.00
10	ATOM 3173	CA	HIS	D	199	61.101	29.966	135.584	1.00	0.00
	ATOM 3174	C	HIS	D	199	60.369	28.641	135.400	1.00	0.00
	ATOM 3175	O	HIS	D	199	59.624	28.226	136.289	1.00	0.00
	ATOM 3176	CB	HIS	D	199	62.397	29.751	136.374	1.00	0.00
	ATOM 3177	CG	HIS	D	199	63.120	31.038	136.672	1.00	0.00
15	ATOM 3178	ND1	HIS	D	199	63.104	31.634	137.926	1.00	0.00
	ATOM 3179	CD2	HIS	D	199	63.852	31.886	135.876	1.00	0.00
	ATOM 3180	CE1	HIS	D	199	63.809	32.775	137.829	1.00	0.00
	ATOM 3181	NE2	HIS	D	199	64.296	32.984	136.605	1.00	0.00
	ATOM 3182	N	TRP	D	200	60.610	27.953	134.276	1.00	0.00
20	ATOM 3183	CA	TRP	D	200	60.223	26.555	134.167	1.00	0.00
	ATOM 3184	C	TRP	D	200	60.886	25.771	135.293	1.00	0.00
	ATOM 3185	O	TRP	D	200	62.041	26.027	135.635	1.00	0.00
	ATOM 3186	CB	TRP	D	200	60.665	25.943	132.832	1.00	0.00
	ATOM 3187	CG	TRP	D	200	59.829	26.267	131.639	1.00	0.00
25	ATOM 3188	CD1	TRP	D	200	60.199	27.050	130.604	1.00	0.00

5	ATOM	3189	CD2	TRP	D	200	58.486	25.796	131.322	1.00	0.00
	ATOM	3190	NE1	TRP	D	200	59.186	27.101	129.669	1.00	0.00
	ATOM	3191	CE2	TRP	D	200	58.101	26.347	130.067	1.00	0.00
	ATOM	3192	CE3	TRP	D	200	57.548	24.971	131.974	1.00	0.00
	ATOM	3193	CZ2	TRP	D	200	56.849	26.091	129.490	1.00	0.00
	ATOM	3194	CZ3	TRP	D	200	56.290	24.702	131.406	1.00	0.00
	ATOM	3195	CH2	TRP	D	200	55.935	25.274	130.173	1.00	0.00
	ATOM	3196	N	SER	D	201	60.169	24.783	135.826	1.00	0.00
10	ATOM	3197	CA	SER	D	201	60.788	23.752	136.633	1.00	0.00
	ATOM	3198	C	SER	D	201	61.744	22.958	135.741	1.00	0.00
	ATOM	3199	O	SER	D	201	61.604	22.970	134.517	1.00	0.00
	ATOM	3200	CB	SER	D	201	59.699	22.849	137.231	1.00	0.00
15	ATOM	3201	OG	SER	D	201	59.106	22.011	136.256	1.00	0.00
	ATOM	3202	N	ASP	D	202	62.679	22.216	136.340	1.00	0.00
	ATOM	3203	CA	ASP	D	202	63.375	21.177	135.595	1.00	0.00
	ATOM	3204	C	ASP	D	202	62.352	20.108	135.194	1.00	0.00
	ATOM	3205	O	ASP	D	202	61.258	20.053	135.761	1.00	0.00
	ATOM	3206	CB	ASP	D	202	64.516	20.596	136.441	1.00	0.00
	ATOM	3207	CG	ASP	D	202	65.392	19.605	135.672	1.00	0.00
	ATOM	3208	OD1	ASP	D	202	65.381	19.664	134.422	1.00	0.00
20	ATOM	3209	OD2	ASP	D	202	66.067	18.807	136.356	1.00	0.00
	ATOM	3210	N	TRP	D	203	62.692	19.268	134.214	1.00	0.00
	ATOM	3211	CA	TRP	D	203	61.868	18.129	133.850	1.00	0.00
	ATOM	3212	C	TRP	D	203	61.882	17.121	134.992	1.00	0.00
	ATOM	3213	O	TRP	D	203	62.931	16.853	135.575	1.00	0.00

	ATOM 3214	CB	TRP	D	203	62.367	17.488	132.553	1.00	0.00
	ATOM 3215	CG	TRP	D	203	62.082	18.277	131.316	1.00	0.00
	ATOM 3216	CD1	TRP	D	203	62.945	19.105	130.689	1.00	0.00
	ATOM 3217	CD2	TRP	D	203	60.833	18.363	130.572	1.00	0.00
5	ATOM 3218	NE1	TRP	D	203	62.324	19.698	129.608	1.00	0.00
	ATOM 3219	CE2	TRP	D	203	61.011	19.286	129.500	1.00	0.00
	ATOM 3220	CE3	TRP	D	203	59.562	17.765	130.704	1.00	0.00
	ATOM 3221	CZ2	TRP	D	203	59.974	19.611	128.614	1.00	0.00
	ATOM 3222	CZ3	TRP	D	203	58.510	18.100	129.836	1.00	0.00
10	ATOM 3223	CH2	TRP	D	203	58.712	19.026	128.801	1.00	0.00
	ATOM 3224	N	SER	D	204	60.716	16.546	135.298	1.00	0.00
	ATOM 3225	CA	SER	D	204	60.617	15.468	136.263	1.00	0.00
	ATOM 3226	C	SER	D	204	61.511	14.310	135.814	1.00	0.00
	ATOM 3227	O	SER	D	204	61.753	14.150	134.616	1.00	0.00
15	ATOM 3228	CB	SER	D	204	59.159	15.013	136.394	1.00	0.00
	ATOM 3229	OG	SER	D	204	58.719	14.432	135.187	1.00	0.00
	ATOM 3230	N	PRO	D	205	62.010	13.497	136.753	1.00	0.00
	ATOM 3231	CA	PRO	D	205	62.834	12.349	136.423	1.00	0.00
	ATOM 3232	C	PRO	D	205	62.088	11.366	135.510	1.00	0.00
20	ATOM 3233	O	PRO	D	205	60.862	11.263	135.555	1.00	0.00
	ATOM 3234	CB	PRO	D	205	63.247	11.734	137.763	1.00	0.00
	ATOM 3235	CG	PRO	D	205	62.215	12.264	138.759	1.00	0.00
	ATOM 3236	CD	PRO	D	205	61.840	13.628	138.190	1.00	0.00
	ATOM 3237	N	SER	D	206	62.860	10.679	134.658	1.00	0.00
25	ATOM 3238	CA	SER	D	206	62.404	9.785	133.603	1.00	0.00

	ATOM	3239	C	SER	D	206	61.519	8.657	134.136	1.00	0.00
	ATOM	3240	O	SER	D	206	62.016	7.742	134.792	1.00	0.00
	ATOM	3241	CB	SER	D	206	63.642	9.214	132.904	1.00	0.00
	ATOM	3242	OG	SER	D	206	64.427	10.273	132.393	1.00	0.00
5	ATOM	3243	N	LEU	D	207	60.220	8.705	133.820	1.00	0.00
	ATOM	3244	CA	LEU	D	207	59.245	7.703	134.216	1.00	0.00
	ATOM	3245	C	LEU	D	207	59.013	6.752	133.040	1.00	0.00
	ATOM	3246	O	LEU	D	207	58.240	7.071	132.136	1.00	0.00
	ATOM	3247	CB	LEU	D	207	57.964	8.431	134.657	1.00	0.00
10	ATOM	3248	CG	LEU	D	207	56.812	7.506	135.069	1.00	0.00
	ATOM	3249	CD1	LEU	D	207	57.166	6.612	136.262	1.00	0.00
	ATOM	3250	CD2	LEU	D	207	55.579	8.350	135.400	1.00	0.00
	ATOM	3251	N	GLU	D	208	59.681	5.589	133.043	1.00	0.00
	ATOM	3252	CA	GLU	D	208	59.386	4.542	132.075	1.00	0.00
15	ATOM	3253	C	GLU	D	208	58.043	3.910	132.437	1.00	0.00
	ATOM	3254	O	GLU	D	208	57.867	3.503	133.584	1.00	0.00
	ATOM	3255	CB	GLU	D	208	60.484	3.468	132.031	1.00	0.00
	ATOM	3256	CG	GLU	D	208	60.215	2.490	130.869	1.00	0.00
	ATOM	3257	CD	GLU	D	208	61.158	1.294	130.865	1.00	0.00
20	ATOM	3258	OE1	GLU	D	208	60.643	0.159	130.970	1.00	0.00
	ATOM	3259	OE2	GLU	D	208	62.377	1.536	130.731	1.00	0.00
	ATOM	3260	N	LEU	D	209	57.121	3.798	131.473	1.00	0.00
	ATOM	3261	CA	LEU	D	209	55.884	3.042	131.613	1.00	0.00
	ATOM	3262	C	LEU	D	209	55.620	2.225	130.356	1.00	0.00
25	ATOM	3263	O	LEU	D	209	56.064	2.579	129.266	1.00	0.00

5	ATOM	3264	CB	LEU	D	209	54.678	3.952	131.872	1.00	0.00
	ATOM	3265	CG	LEU	D	209	54.705	4.699	133.207	1.00	0.00
	ATOM	3266	CD1	LEU	D	209	53.449	5.572	133.311	1.00	0.00
	ATOM	3267	CD2	LEU	D	209	54.734	3.758	134.418	1.00	0.00
	ATOM	3268	N	ARG	D	210	54.878	1.129	130.534	1.00	0.00
10	ATOM	3269	CA	ARG	D	210	54.508	0.210	129.477	1.00	0.00
	ATOM	3270	C	ARG	D	210	53.076	0.505	129.067	1.00	0.00
	ATOM	3271	O	ARG	D	210	52.167	0.426	129.894	1.00	0.00
	ATOM	3272	CB	ARG	D	210	54.605	-1.239	129.962	1.00	0.00
	ATOM	3273	CG	ARG	D	210	55.884	-1.520	130.753	1.00	0.00
15	ATOM	3274	CD	ARG	D	210	55.981	-3.024	131.034	1.00	0.00
	ATOM	3275	NE	ARG	D	210	56.871	-3.686	130.071	1.00	0.00
	ATOM	3276	CZ	ARG	D	210	58.204	-3.789	130.210	1.00	0.00
	ATOM	3277	NH1	ARG	D	210	58.821	-3.287	131.289	1.00	0.00
	ATOM	3278	NH2	ARG	D	210	58.924	-4.393	129.258	1.00	0.00
20	ATOM	3279	N	THR	D	211	52.873	0.821	127.792	1.00	0.00
	ATOM	3280	CA	THR	D	211	51.530	0.924	127.257	1.00	0.00
	ATOM	3281	C	THR	D	211	50.782	-0.395	127.477	1.00	0.00
	ATOM	3282	O	THR	D	211	51.401	-1.460	127.453	1.00	0.00
	ATOM	3283	CB	THR	D	211	51.621	1.295	125.776	1.00	0.00
25	ATOM	3284	OG1	THR	D	211	50.334	1.641	125.333	1.00	0.00
	ATOM	3285	CG2	THR	D	211	52.191	0.155	124.919	1.00	0.00
	ATOM	3286	N	THR	D	212	49.463	-0.340	127.691	1.00	0.00
	ATOM	3287	CA	THR	D	212	48.651	-1.549	127.658	1.00	0.00
	ATOM	3288	C	THR	D	212	48.820	-2.188	126.276	1.00	0.00

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ATOM 3289 O   THR D 212  48.872 -1.472 125.279 1.00 0.00
ATOM 3290 CB  THR D 212  47.187 -1.189 127.920 1.00 0.00
ATOM 3291 OG1 THR D 212  47.057 -0.551 129.171 1.00 0.00
ATOM 3292 CG2 THR D 212  46.259 -2.408 127.910 1.00 0.00
5  ATOM 3293 N   GLU D 213  48.939 -3.516 126.218 1.00 0.00
ATOM 3294 CA  GLU D 213  49.110 -4.229 124.961 1.00 0.00
ATOM 3295 C   GLU D 213  47.836 -4.092 124.118 1.00 0.00
ATOM 3296 O   GLU D 213  46.756 -4.356 124.694 1.00 0.00
ATOM 3297 CB  GLU D 213  49.439 -5.705 125.233 1.00 0.00
10 ATOM 3298 CG  GLU D 213  50.634 -5.929 126.178 1.00 0.00
ATOM 3299 CD  GLU D 213  51.956 -5.359 125.665 1.00 0.00
ATOM 3300 OE1 GLU D 213  52.762 -4.940 126.525 1.00 0.00
ATOM 3301 OE2 GLU D 213  52.163 -5.386 124.432 1.00 0.00
END

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The first row through the last row but one describe
 three-dimensional coordinates for each atom. "ATOM" at the
 first column indicates that the row describes atom
 coordinates; the second column indicates the atom number;
 the third column indicates the atom type in the amino acid
 residue; the fourth column indicates the amino acid
 residue; the fifth column indicates the class of molecule
 (one particular class indicates a single polypeptide); the
 sixth column indicates the amino acid number according to
 SEQ ID NO: 3; the seventh, eighth, and ninth columns

indicate coordinates of the atom (in Å for a-axis, b-axis, and c-axis directions in the order); the tenth column indicates the occupancy of the atom (in the present invention 1.00 for all atoms); and the eleventh column indicates the temperature factor of the atom (although in the present invention the value is expedientially 0.00, this value has no special mean). The last row indicates that the table ends at this row. In connection with the class of molecule, B and D each indicate one molecule of CRH-G-CSF-R. This table is described according to the format of Protein Data Bank, a notation system commonly used in the art.

Again, based on the three-dimensional structure coordinates shown in Table 6, amino acid residues characterizing the interactions can be located. When the homology between amino acid sequences becomes less than 20%, the reliability of derived three-dimensional structure coordinates declines. Since both human and mouse belongs to Mammalia, it is expected that amino acid sequences of a mammal-type G-CSF and a mammal-type G-CSF-R are highly homologous to those of human and mouse-type, respectively. Accordingly, if an exact amino acid sequence is determined for such a protein derived from a mammal, three-dimensional structure coordinates can easily be derived using the structure coordinates of the present invention.

The structure coordinates shown in Tables 1 and 6 are described by setting the origin of a unit cell in the crystal as the origin of the three-dimensional space. When, for example, the structure coordinates of the present invention are used in calculations with a computer, new structure coordinates obtained by mathematical operations such as translation, rotation, or symmetry transformation without altering relative positions of the atoms are also within the scope of the present invention.

The above structure coordinates were determined for the complex between G-CSF and CRH-G-CSF-R. However, since CRH-G-CSF-R can be considered as an equivalent of G-CSF-R in respect to binding with G-CSF, it is believed that the structure coordinates obtained above are substantially retained unchanged even in the complex between G-CSF and G-CSF-R. Therefore, the structure coordinates obtained above can be used to elucidate binding between G-CSF and G-CSF-R. Furthermore, they can also be used to identify, search for, evaluate, or design variants, agonists, or antagonists of G-CSF.

3. Use of structure coordinates of the complex for preparation of G-CSF variants

It becomes possible to express the mode of three-dimensional chemical interactions between G-CSF and CRH-G-

CSF-R in detail by entering the structure coordinates obtained from the crystal of the complex between G-CSF and CRH-G-CSF-R of the present invention into a computer on which a computer program expressing three-dimensional coordinates of molecules runs or into a storage medium of the computer.

Such a computer storage medium is not particularly restricted so long as it can load the structure coordinates obtained from the crystal of the complex between G-CSF and CRH-G-CSF-R into the program. For example, it may be an electrical temporary storage medium known as a memory or a semipermanent storage medium such as a floppy disk, hard disk, optical disk, magneto-optical disk, or magnetic tape.

Likewise, it also becomes possible for the first time to achieve logical design in three-dimensional space for obtaining a variant having activities as an agonist of G-CSF which possesses, for example, higher biological activities, higher biological stability, or better physical properties such as higher thermodynamic stability when compared with the native G-CSF, or for obtaining a variant having activities as an antagonist, for example, which retains binding activity to G-CSF-R but inhibits inherent biological activities of G-CSF, by entering the structure coordinates obtained from the complex between G-CSF and CRH-G-CSF-R of the present invention into a computer on

which a computer program expressing three-dimensional coordinates of molecules runs or into a storage medium of the computer and by conducting visual examinations and/or energy calculations.

5 Many computer programs which express three-dimensional structure coordinates of protein molecules are commercially available, and they typically provide a means for entering three-dimensional structure coordinates of a molecule, a means for visually expressing the coordinates on the
10 computer screen, a means for measuring interatomic distances or angles in the expressed molecule, a means for editing the coordinates, and the like.

In addition, programs prepared so that it can provide a means for calculating structure energy of a molecule
15 based on coordinates of the molecule and a means for calculating free energy taking into account solvent molecules such as water molecules may also be used. Examples of programs suitable for such purposes include, but not limited to, Insight II or QUANTA commercially
20 available from Molecular Simulation, Inc.

Such programs are usually installed for use on a computer called workstation supplied by Silicon Graphics, Inc., Sun Microsystems, Inc., or the like, although the present invention is not so limited.

25 Those skilled in the art can understand for the first

time the binding mode of the complex between G-CSF and CRH-G-CSF-R in a state in which the atomic positions in three-dimensional space are expressed, using a computer tuned to run a suitable program for the purpose, by entering the structure coordinates of the complex between G-CSF and CRH-G-CSF-R of the present invention into the computer or into a storage medium of the computer, and it becomes thereby possible for the first time to logically and three-dimensionally design a G-CSF variant for obtaining a variant having activity as an agonist or antagonist as described above.

In one of representative methods for designing a G-CSF variant, three-dimensional structure coordinates of the complex between G-CSF and CRH-G-CSF-R of the present invention are entered into a computer or a storage medium of the computer, and the three-dimensional structure of the protein is displayed on the computer screen using a suitable program to conduct visual examinations.

First, interacting amino acid residues and amino acid residue adjacent thereto in the complex between G-CSF and CRH-G-CSF-R are particularly displayed on the computer screen. One or more amino acid residues on the G-CSF side are then subjected to mutation such as substitution, deletion, or insertion, or to chemical modification in the computer, and changes in interactions produced by such

alterations are observed on the computer screen. In this step, to describe three-dimensional structure of a protein on a computer screen, a three-dimensional representation using Crystal Eye glasses supplied by Silicon Graphics, Inc.

5 or a method called Stereo View which displays two kinds of pictures corresponding to the visual fields of right and left eyes at the same time may be used for easier understanding of three-dimensional space, but visual examinations can also be achieved without using such a three-dimensional representation. Local structure

10 coordinates which change due to mutation such as substitution, deletion, or insertion or due to chemical modification can be obtained by determining spatial positions of the atoms so as to retain the validities of the chemical bonds. In this step, one may let the computer

15 display candidates for appropriate conformations and select therefrom or may also let the computer calculate to determine a structure lowering the energy state. From such candidates, mutations or chemical modifications of G-CSF 20 which result in more preferable binding with CRH-G-CSF-R are found.

Thus, in order to design a G-CSF variant having activity as an agonist, mutations are introduced into amino acid residues shown in Tables 2, 3, 4, and 5 which 25 interacts with CRH-G-CSF-R to form the complex, that is,

amino acid residues S13, L16, K17, E20, Q21, R23, K24, L109, D110, D113, T116, T117, Q120, E123, E124 and their adjacent regions and/or amino acid residues which form the associate, that is, amino acid residues G5, P6, A7, S8, S9, L10, P11, Q12, L125 and their adjacent regions so that they will more tightly bind with interacting amino acid residues in the corresponding regions on the CRH-G-CSF-R side. In this context, "their adjacent regions" refers to the regions which participate in interactions such as electrostatic interaction, hydrophobic interaction, van der Waals interaction, and hydrogen bonding with the amino acid residues in question, in particular the regions within about 5Å. The same applies throughout the present specification.

In addition, designing of a variant G-CSF having activity as an agonist, for example, by introducing mutations into positions other than those mentioned above is also within the scope of the present invention so long as the procedure employs the structure coordinates of the present invention.

Noncovalent interactions to be considered in this step include electrostatic interaction, hydrophobic interaction, van der Waals interaction, hydrogen bonding, and the like, and an ultimate design for a variant may be prepared comprehensively taking these interactions into account.

For example, mutations are introduced so that in the neighborhood of a side chain of an amino acid residue having negative charge such as glutamic or aspartic acid on the CRH-G-CSF-R side, a side chain of an amino acid residue having positive charge such as lysine, arginine, or histidine will be positioned at an adjacent amino acid residue on the G-CSF, or reversely so that in the neighborhood of a side chain of an amino acid residue having positive charge such as lysine, arginine, or histidine on the CRH-G-CSF-R side, a side chain of an amino acid residue having negative charge such as glutamic or aspartic acid will be positioned at an adjacent amino acid residue on the G-CSF. Likewise, in a region wherein amino acid residues having highly hydrophobic side chains such as alanine, leucine, isoleucine, valine, proline, phenylalanine, tryptophan, and methionine mainly come together to interact, a position at which a hydrophilic amino acid residue such as serine, threonine, tyrosine, asparagine, or glutamine or a changed amino acid residue such as aspartic acid, glutamic acid, lysine, arginine, or histidine exists is sought in G-CSF and the found amino acid residue is replaced by a hydrophobic amino acid residue in order to strengthen the hydrophobic interaction. Furthermore, for backbone portions or side chain portions of amino acid residues like serine or tyrosine, which can

form hydrogen bonds, corresponding amino acid residues are mutated so as to produce additional hydrogen bonds. In the above mutation, it is necessary to take care to maximize van der Waals interaction while avoiding steric hindrance among atoms in side chains of amino acid residues and backbone portions. In addition, it is also necessary to consider so as not to produce any new empty space, or in a region wherein an empty space already exists, it is necessary to consider so as to fill the empty space as much as possible. Thus, an ultimate design for a variant can be prepared in visual and comprehensive consideration of electrostatic interaction, hydrophobic interaction, van der Waals interaction, hydrogen bonding, and other factors on a computer screen.

Likewise, in order to design a G-CSF variant having activities as an antagonist, mutations are firstly introduced into amino acid residues shown in Tables 2, 3, 4, and 5 which interacts with CRH-G-CSF-R to form the complex, that is, amino acid residues S13, L16, K17, E20, Q21, R23, K24, L109, D110, D113, T116, T117, Q120, E123, E124 and their adjacent regions and/or amino acid residues which form the associate, that is, amino acid residues G5, P6, A7, S8, S9, L10, P11, Q12, L125 and their adjacent regions. A variant is then selected so that by binding of the variant G-CSF to CRH-G-CSF-R, intrinsic relative positions in

three-dimensional space are not retained between G-CSF and two molecules of CRH-G-CSF-R, or such that the variant G-CSF can not interact with CRH-G-CSF-R in the complex or associate forming regions described above and consequently has activity as an antagonist against native G-CSF.

In addition, designing of a variant G-CSF having an antagonist, for example, by introducing mutations into positions other than those mentioned above is also within the scope of the present invention so long as the procedure employs the structure coordinates of the present invention.

Noncovalent interactions to be considered in this step are the same as in the case of G-CSF variants having activity as an agonist and an ultimate design for a variant may be prepared visually and comprehensively taking into account electrostatic interaction, hydrophobic interaction, van der Waals interaction, hydrogen bonding, and other factors on a computer screen.

The second method is to design the above variants by evaluation of binding with CRH-G-CSF-R using energy calculations on a computer. Energy calculations may be achieved by using a computer program which executes molecular force field calculations generally carried out in the art. Programs suitable for such purposes include, but not limited to, CVFF, AMBER force field optimized for proteins, which is contained in DISCOVER module of Insight

II.

Furthermore, the first and the second design techniques are not strictly sorted out from each other, and both techniques may be used in combination. Specifically, with candidates expected by visual examinations to be more desirable, energy calculations are actually conducted using the second technique to evaluate their validities, and better variants are designed by repeating such steps.

As described above, preparation of variants which has been hitherto conducted by trial and error under conditions lacking theoretical supports relating to the three-dimensional structure can be achieved on the basis of theoretical analysis in three-dimensional space by using the structure coordinates of the present invention.

The structure coordinates of amino acid residues on the CRH-G-CSF-R side used in the first and second design techniques may be those of mouse-type CRH-G-CSF-R shown in Table 1 of the present specification or those of human-type CRH-G-CSF-R shown in Table 6. Furthermore, they may also be structure coordinates newly prepared, for example, by calculations with a computer based on such structure coordinates using sequences of G-CSF and G-CSF-R derived from other species having a high homology to the amino acid sequences of the above CRH-G-CSF-Rs, or they may even be structure coordinates excerpted in part therefrom. For

designing a variant for human medication, it is more desirable to use structure coordinates of human-type CRH-G-CSF-R. As to the structure coordinates of CRH-G-CSF-R used, it is not necessary to use all coordinates of the receptor portion. Since the regions corresponding to the interacting portions of G-CSF and CRH-G-CSF-R shown in Tables 2, 3, 4, and 5 are important for designing a variant, it is also possible that the coordinates of amino acid residues involved in such interactions or, if necessary, of amino acid residues adjacent thereto are selected from Table 1 or 6 and used for designing. In such designing, although structure coordinates of G-CSF and CRH-G-CSF-R are usually used while being fixed in three-dimensional space, it is not necessarily required to fix the coordinates. In particular, the two molecules of the receptor existing in a crystallographic asymmetric unit may be each subjected to translation or rotation in three-dimensional space as a block, and furthermore, amino acid residues in each block may also be displaced to such an extent that no chemical covalent bonds are cleaved to calculate energy of binding with a G-CSF variant. The structure coordinates changed due to translation, rotation, or displacement during such calculations in three-dimensional space are within the scope of the present invention.

Variants designed according to the present invention

may be prepared by many methods. For example, a DNA encoding a variant designed on the basis of the present invention may be obtained as follows: at a position identified as an amino acid residue of which mutation will

5 enhance biological activities on the basis of the present invention, an oligonucleotide portion encoding the corresponding amino acid residue is replaced by chemically synthesizing an oligonucleotide corresponding to the variant and substituting it for the native oligonucleotide

10 using sequence-specific oligonucleotide cleaving enzymes (restriction enzymes). The variant DNA obtained may be then incorporated into an appropriate expression vector, introduced into an appropriate host cell, and expressed as a recombinant protein to obtain the above variant. Such

15 preparation methods are commonly used in the art (see, e.g., "CURRENT PROTOCOLS Compact-ban: Bunshi-seibutsu-gakujikken-Protocol", I, II, III", translators: Kaoru Saigou and Yumiko Sano, Maruzen: the original is Ausubel F. M. et al., "Short Protocols in Molecular Biology", Third Edition, 20 John Wiley & Sons, Inc., New York).

Likewise, chemical modifications of amino acid residues are also generally conducted in the art (see, e.g., Hirs, C. H. W. and Timasheff, S. N. eds., (1977), Methods in Enzymology, Vol. 47, pp. 407-498, Academic Press, New 25 York).

4. Use of structure coordinates of the complex for preparation of G-CSF agonists

By entering all or part of the structure coordinates of the complex between G-CSF and CRH-G-CSF-R provided by the present invention into a computer on which a computer program expressing three-dimensional coordinates of molecules runs or into a storage medium of the computer, it becomes possible to identify, search for, evaluate, or design compounds which bind to CRH-G-CSF-R and thereby provide the CRH-G-CSF-R with positions in three-dimensional space substantially identical to those of the two molecules of CRH-G-CSF-R in the associate of G-CSF and CRH-G-CSF-R and which have biological activities equal or superior to those of G-CSF. In the art, such compounds are collectively referred to as agonists. The compounds may be natural or synthetic, and may be high molecular weight or low molecular weight compounds.

As described above, it is believed that the complex formed by one molecule of G-CSF and one molecule of G-CSF-R further self-associate into a dimer and the signal of G-CSF is thereby received by G-CSF-R. Accordingly, agonists should bind to CRH-G-CSF while retaining spatial position of the two molecules of CRH-G-CSF-R in the associate.

For example, Indigo 2, a workstation supplied by

Silicon Graphics, Inc., is suitable as a computer used for designing agonists. However, the computer is not limited to this one, and any computer may be used so long as it is tuned to run an appropriate program. Likewise, there is no particular limitation on the computer storage medium. For example, Insight II, a computer program commercially available from Molecular Simulation, Inc. may be used as a program for designing. In particular, a program Ludi or DOCK, a module of Insight II specially prepared for such purposes, may be used alone or in combination to facilitate identification, searching, evaluation, or designing. Furthermore, designing of agonists according to the techniques described in Japanese Patent Kokai Publication Nos. H6-309385 (1994) and H7-133233 (1995) can also be achieved for the first time by using structure coordinates of the complex between G-CSF and CRH-G-CSF-R of the present invention. The present invention is, however, not limited to these programs and techniques.

In designing of agonists, there are conceptually two steps. The first step is to find a compound which serves as a starting point for drug design, known for those skilled in the art as a lead compound. The next step is optimization of the lead compound wherein compounds having better properties as medicines, for example, having better activity, having better pharmacokinetics, or having less

toxicities and side effects are sought starting from the lead compound.

The step in which a lead compound is found using the structure coordinates of the complex between G-CSF and CRH-G-CSF-R provided by the present invention is achieved, for example, using a database in a computer into which structures of plural compounds have been entered, by a method in which interactions between three-dimensional structures of a compound in the database and CRH-G-CSF-R are sorted out in a visual manner one after another, or by a method in which amplitudes of binding energy are calculated one after another using a computer and compounds which stably bind to CRH-G-CSF-R are found from the database. Although it is preferred that the database of compound's structures contains determined three-dimensional structure coordinates entered therein, for low molecular weight compounds, it does not have to be a database of three-dimensional structure coordinates, because such low molecular weight compounds may change their conformations relatively freely, and also because three-dimensional structure coordinates for each conformation can be derived by calculations in a relatively short time. In the latter cases, information for chemical covalent bonds of low molecular weight compounds are entered into the database.

Specifically, in the visual method, two molecules of

CRH-G-CSF-R in the associate are firstly displayed on a computer screen according to the structure coordinates of the present invention. In this step, although a three-dimensional representation may be made on the computer screen using, for example, Crystal Eye as described above, visual examinations can also be achieved without using such a three-dimensional representation. Then, on the computer, compounds in the database are allowed to bind with two molecules of CRH-G-CSF-R taking chemical interactions into account, and are evaluated one after another whether or not it can strongly bind with CRH-G-CSF-R, and if it can do so, whether or not the relative positions taken by the two molecules of CRH-G-CSF-R interacting with the compound are similar to those of the two molecules of CRH-G-CSF-R in the associate. In this connection, it is preferred that the compound binds with two molecules of CRH-G-CSF-R at a total of two or more sites (at least one site with each CRH-G-CSF-R) so that the relative positions taken by the two molecules of CRH-G-CSF-R in three-dimensional space are maximally conserved. Relative positions taken by the two molecules of CRH-G-CSF-R in three-dimensional space do not have to be strictly conserved, and are permitted to vary to a certain degree so long as activity of the compound as an agonist is retained.

Chemical interactions to be considered include

electrostatic interaction, hydrophobic interaction, hydrogen bonding, van der Waals interaction, and the like. Thus, the structure should be comprehensively examined whether it is favorable for interactions, for example, so

5 that functional groups which tend to bear negative charge such as carboxyl group, nitro group, and halogens interact with amino acid residues in CRH-G-CSF-R having positive charge such as lysine, arginine, and histidine, so that

10 functional groups which tend to bear positive charge such as amino, imino, and guanidyl groups interact with amino acid residues in CRH-G-CSF-R having negative charge such as glutamic acid and aspartic acid, so that hydrophobic functional groups such as aliphatic groups and aromatic groups interact with hydrophobic amino acid residues such

15 as alanine, leucine, isoleucine, valine, proline, phenylalanine, tryptophan and methionine, so that functional groups involved in hydrogen bonding such as hydroxyl and amide groups can form hydrogen bonds with backbone or side chain portions of CRH-G-CSF-R, so that

20 binding between the compound and CRH-G-CSF-R causes no steric hindrance, and so that empty spaces are filled to minimize such empty spaces and maximize van der Waals interaction. Thus, electrostatic interaction, hydrophobic interaction, van der Waals interaction, hydrogen bonding,

25 and other factors are visually and comprehensively

considered to finally determine whether or not the compound is suitable as a lead compound.

In the method by energy evaluation with a computer, the energy of binding between a compound and the two molecules of CRH-G-CSF-R in the associate is determined by molecular force field calculations. Such calculations are applied to each compound in the database to find a compound which may serve as a lead compound capable of stable binding. As a molecular force field used in the calculations, for example, CVFF, AMBER force field optimized for proteins, which is contained in DISCOVER module of Insight II program may be used. In addition, some computer programs like Ludi in Insight II can automatically output candidates for lead compound when three-dimensional structure coordinates of interacting amino acid residues in a protein molecule are given, and such programs may also be applied to G-CSF or CRH-G-CSF-R.

Furthermore, the visual examinations and the examination considering energy are not strictly sorted out from each other, and both techniques may be used in combination as appropriate.

The next step, in which optimization of the lead compound is conducted using the structure coordinates of the complex between G-CSF and CRH-G-CSF-R provided by the present invention, is used for the purpose of, where a lead

compound which binds to CRH-G-CSF-R has already been found by the above method or separately found in an experimental manner, optimizing the lead compound to obtain a better compound, for example, a compound having higher biological activities as an agonist or a compound having a structure favorable for oral administration as a medicine. As a method of experimentally finding a lead compound, a lead compound may be selected, for example, from a series of compounds known in the art as a combinatorial library or from a culture medium of a microbe or the like. Furthermore, it may even be a compound which is found in the course of designing of antagonists described below. In short, it becomes possible only after a precise picture of chemical bonding between the lead compound and CRH-G-CSF-R has been elucidated to directly find a site which is not optimal for interactions between the lead compound and CRH-G-CSF-R and to design a new compound having an optimal functional group at that site, thereby enabling to design a more optimized compound.

Although in order to exactly understand the binding mode between a lead compound and CRH-G-CSF-R in an early stage, it is more desirable to use a method in which a cocrystal of the lead compound and CRH-G-CSF-R is prepared and a precise picture of chemical interactions between the lead compound and CRH-G-CSF-R is experimentally elucidated

by X-ray crystallography using a molecular replacement method which is encompassed by the present invention and hereinafter described, chemical interactions between the lead compound and CRH-G-CSF-R may also be understood by visual examinations or energy calculations using a computer.

For visual examinations with a computer, a model of the complex between the lead compound and CRH-G-CSF-R is firstly displayed on a computer screen by entering the three-dimensional structure coordinates of the lead compound and the structure coordinates of CRH-G-CSF-R provided by the present invention into a computer on which a computer program expressing three-dimensional coordinates of molecules runs or into a storage medium of the computer. In this step, although a three-dimensional representation may be made on the computer screen using, for example, Crystal Eye as described above, visual examinations can also be achieved without using such a three-dimensional representation. It is a logical designing of a compound to modify the lead compound so as to yield a compound more favorably interacting with CRH-G-CSF-R or a compound having better pharmacokinetics while retaining the interactions.

Chemical interactions to be considered are the same as in the step to find a lead compound, and a new compound having better properties as an agonist is finally designed starting from the lead compound.

In the method by energy evaluation with a computer, the energy of binding between a new compound designed from the lead compound and CRH-G-CSF-R is determined by molecular force field calculations to judge the validity of the design. In addition, it is also possible to use a method in which other molecules such as solvent molecules are additionally included in the model and the free energy is determined using molecular dynamics to derive a compound capable of stable binding. As a molecular force field used in the calculations, for example, CVFF, AMBER force field optimized for proteins, which is contained in DISCOVER module of Insight II program may be used.

Furthermore, the visual examinations and the method by energy evaluations may be used in combination as appropriate.

It is preferred that the newly designed compound binds with two molecules of CRH-G-CSF-R at a total of two or more sites (at least one site with each CRH-G-CSF-R) so that the relative positions taken by the two molecules of CRH-G-CSF-R in three-dimensional space are maximally conserved. Relative positions taken by the two molecules of CRH-G-CSF-R in three-dimensional space do not have to be strictly conserved, and are permitted to vary to a certain degree so long as activity of the compound as an agonist is retained. The structure coordinates changed due to translation,

rotation, or displacement during such calculations in three-dimensional space are within the scope of the present invention.

The structure coordinates of amino acid residues on the CRH-G-CSF-R side used in the above techniques may be those of mouse-type CRH-G-CSF-R shown in Table 1 of the present specification, those of human-type CRH-G-CSF-R shown in Table 6, or even those prepared by calculations based on such structure coordinates. For designing a variant as a medicine for human, it is more desirable to use structure coordinates of human-type CRH-G-CSF-R. As to the structure coordinates of CRH-G-CSF-R used, it is not necessary to use all coordinates of the receptor portion. Since the regions corresponding to the interacting portions of G-CSF and CRH-G-CSF-R shown in Tables 2, 3, 4, and 5 are important for agonists, it is also possible that coordinates of amino acid residues involved in such interactions and, if necessary, of amino acid residues adjacent thereto are selected from Table 1 or 6 and used for designing. Thus, a G-CSF agonist which retains relative positions taken by the two molecules of CRH-G-CSF-R in the associate can be obtained by selecting structure coordinates of the regions corresponding to those amino acid residues and by designing a compound so that one molecule of the compound simultaneously binds to the two

regions of CRH-G-CSF-R to which one molecule of G-CSF binds.

For designing an agonist which can bind while retaining the relative positions taken by the two molecules of CRH-G-CSF-R in the associate, it is also useful to employ the structure coordinates of the region spatially surrounded by the two molecules of CRH-GS-CSF-R. These spatially surrounding amino acid residues are characterized by Y3 to L14, R46 to Y51, G92 to V106, E145 to E147, H166 to S169, S194 to G198. Accordingly, structure coordinates corresponding to these amino acid residues and, if necessary, amino acid residues adjacent thereto may be selected from Table 1 or 6 and used for designing. Thus, a G-CSF agonist which retains relative positions taken by the two molecules of CRH-G-CSF-R in the associate can be obtained by designing a compound so that the compound fits into the cavity surrounded by these amino acid residues and simultaneously binds to two or more regions of each CRH-G-CSF-R while minimizing the energy.

Agonists designed by the above techniques may be obtained by commonly used techniques for chemical synthesis depending on the particular compound.

5. Use of structure coordinates of the complex for preparation of G-CSF antagonists

By entering all or part of the structure coordinates

of the complex between G-CSF and CRH-G-CSF-R provided by the present invention into a computer on which a computer program expressing three-dimensional coordinates of molecules runs or into a storage medium of the computer, it becomes possible for the first time to identify, search for, evaluate, or design compounds which bind with G-CSF and/or CRH-G-CSF-R and inhibit biological activities of G-CSF. In the art, such compounds are collectively referred to as antagonists. The compounds may be natural or synthetic, and may be high molecular weight or low molecular weight compounds.

As described above, it is believed that the complex formed by one molecule of G-CSF and one molecule of G-CSF-R further self-associates into a dimer and the signal of G-CSF is thereby received by G-CSF-R. Accordingly, an antagonist should bind to G-CSF and/or CRH-G-CSF so that it provides positions in three-dimensional space different from those of the two molecules of CRH-G-CSF-R in the associate formed by the natural G-CSF and CRH-G-CSF-R, or so that it inhibits formation of the complex or the associate between G-CSF and CRH-G-CSF.

Thus, there are several embodiments of antagonists, for example,

(1) antagonists which bind to G-CSF and inhibit formation of the complex,

(2) antagonists which bind to G-CSF-R and inhibit formation of the complex,

(3) antagonists which bind to G-CSF and/or G-CSF-R and allow formation of the complex, but inhibit formation of the associate, and

(4) antagonists which bind to G-CSF and/or G-CSF-R and allow formation of the complex and the associate, but result in an abnormal structure which prevent the signal from entering into the cell.

As in the case of agonists, a computer used for designing antagonists is not particularly limited so long as it is tuned to run an appropriate program. Likewise, there is no particular limitation on the computer storage medium. For example, Insight II, a computer program commercially available from Molecular Simulation, Inc. may be used as a program for designing. In particular, a program Ludi or DOCK, a module of Insight II specially prepared for such purposes, may be used alone or in combination to facilitate identification, searching, evaluation, or designing. Furthermore, designing of antagonists according to the techniques described in Japanese Patent Kokai Publication Nos. H6-309385 (1994) and H7-133233 (1995) can also be achieved for the first time by using structure coordinates of the complex between G-CSF and CRH-G-CSF-R of the present invention. The present

invention is, however, not limited to these programs and techniques.

In designing of antagonists, there are conceptually two steps as in the case of agonists. The first step is to find a lead compound and the next step is a process for optimization of the lead compound.

The step in which a lead compound for antagonists is found using the structure coordinates of the complex between G-CSF and CRH-G-CSF-R provided by the present invention is achieved, for example, using a database in a computer into which structures of plural compounds have been entered, by a method in which interactions between three-dimensional structures of a compound in the database and G-CSF and/or CRH-G-CSF-R are sorted out in a visual manner one after another, or by a method in which amplitudes of binding energy are calculated one after another using a computer and compounds which stably bind to G-CSF and/or CRH-G-CSF-R are found from the database. Although it is preferred that the database of compound's structures contains determined three-dimensional structure coordinates entered therein, for low molecular weight compounds, it does not have to be a database of three-dimensional structure coordinates, because such low molecular weight compounds may change their conformations relatively freely, and also because three-dimensional

structure coordinates for each conformation can be derived by calculations in a relatively short time. In the latter cases, information for chemical covalent bonds of low molecular weight compounds are entered into the database.

Specifically, in the visual method, G-CSF and/or CRH-G-CSF-R molecule or molecules are firstly displayed on a computer screen according to the structure coordinates of the present invention. In this step, although a three-dimensional representation may be made on the computer screen using, for example, Crystal Eye as described above, visual examinations can also be achieved without using such a three-dimensional representation. Then, on the computer, compounds in the database are allowed to bind with G-CSF and/or CRH-G-CSF-R molecule or molecules taking chemical interactions into account, and are evaluated one after another whether or not the compound can function to provide positions in three-dimensional space different from those taken by the two molecules of CRH-G-CSF-R in the associate formed by G-CSF and CRH-G-CSF-R or to inhibit formation of the complex or the associate between G-CSF and CRH-G-CSF-R. It is desirable that at least one of the sites at which an antagonist binds to G-CSF and/or CRH-G-CSF-R corresponds to the amino acid residue at which G-CSF binds to CRH-G-CSF-R or an amino acid residue adjacent thereto, and a compound of which binding to G-CSF and/or CRH-G-CSF-R sterically

hinders the binding between G-CSF and CRH-G-CSF-R with the result that relative positions intrinsically taken by the two molecules of CRH-G-CSF-R in three-dimensional space are not retained or that formation of the complex and/or the associate between G-CSF and CRH-G-CSF-R is inhibited is selected. Furthermore, the compound does not need to simultaneously bind with two molecules of G-CSF, two molecules of CRH-G-CSF-R, or one molecule of G-CSF and one molecule of CRH-G-CSF-R, and it is preferred that a compound which binds to one molecule of G-CSF or CRH-G-CSF-R is selected.

Chemical interactions to be considered are the same as in the case of agonists and final judgement as to whether or not the compound is appropriate as a lead compound is made visually and comprehensively taking into account such interactions.

In the method by energy evaluation with a computer, the energy of binding between a compound selected from the database and G-CSF and/or CRH-G-CSF-R is determined as in the case of agonists to find a compound which may serve as a lead compound for antagonists from the database. As a molecular force field used in the calculations, for example, CVFF, AMBER force field optimized for proteins, which is contained in DISCOVER module of Insight II program may be used. In addition, some computer programs like Ludi in

Insight II can automatically output candidates for lead compound when three-dimensional structure coordinates of interacting amino acid residues in a protein molecule are given.

5 The next step, in which optimization of the lead compound is conducted using the structure coordinates of the complex between G-CSF and CRH-G-CSF-R provided by the present invention, is used for the purpose of, where a lead compound which binds to G-CSF and/or CRH-G-CSF-R has
10 already been found by the above method or separately found in an experimental manner, optimizing the lead compound to obtain a better compound, for example, a compound having higher biological activities as an antagonist or a compound having a structure favorable for oral administration as a
15 medicine. The method for experimentally finding a lead compound is the same as that for agonists, and a compound found in the above-described designing of agonists may also be used as a lead compound. In short, it becomes possible
20 only after a precise picture of chemical bonding between the lead compound and G-CSF and/or CRH-G-CSF-R has been elucidated to directly find a site which is not optimal for interactions between G-CSF and/or CRH-G-CSF-R and the lead compound and to design a new compound having an optimal functional group at that site, thereby enabling to design a
25 more optimized compound.

Although in order to exactly understand the binding mode between a lead compound and G-CSF and/or CRH-G-CSF-R in an early stage, it is more desirable to use a method in which a cocrystal of the lead compound and G-CSF and/or CRH-G-CSF-R is prepared and a precise picture of chemical interactions between the lead compound and G-CSF and/or CRH-G-CSF-R is experimentally elucidated by X-ray crystallography using a molecular replacement method which is encompassed by the present invention and hereinafter described, understanding of chemical interactions by visual examinations or energy calculations using a computer may also suffice.

For visual examinations with a computer, a model of the complex between G-CSF and/or CRH-G-CSF-R and the lead compound is firstly displayed on a computer screen by entering the three-dimensional structure coordinates of the lead compound and the structure coordinates of G-CSF and/or CRH-G-CSF-R provided by the present invention into a computer on which a computer program expressing three-dimensional coordinates of molecules runs or into a storage medium of the computer. In this step, although a three-dimensional representation may be made on the computer screen using, for example, Crystal Eye as described above, visual examinations can also be achieved without using such a three-dimensional representation. It is a logical

designing of a compound to modify the lead compound so as to yield a compound which binds to G-CSF and/or CRH-G-CSF-R and inhibits interactions between G-CSF and CRH-G-CSF-R or a compound having better pharmacokinetics while retaining the ability of inhibiting interactions.

Chemical interactions to be considered are the same as in the step to find a lead compound, and a new compound having better properties as an antagonist is finally designed starting from the lead compound.

In the method by energy evaluation with a computer, the energy of binding between a new compound designed from the lead compound and G-CSF and/or CRH-G-CSF-R is determined by molecular force field calculations to judge the validity of the design. In addition, it is also possible to use a method in which other molecules such as solvent molecules are additionally included in the model and the free energy is determined using molecular dynamics to derive a compound capable of stable binding. As a molecular force field used in the calculations, for example, CVFF, AMBER force field optimized for proteins, which is contained in DISCOVER module of Insight II program may be used.

Furthermore, the visual examinations and the method by energy evaluations may be used in combination as appropriate.

The structure coordinates of amino acid residues on the G-CSF and/or CRH-G-CSF-R side(s) used in the above techniques may be those of human-type G-CSF and mouse-type CRH-G-CSF-R shown in Table 1 of the present specification, those of human-type CRH-G-CSF-R shown in Table 6, or even those prepared by calculations based on such structure coordinates. For designing a variant as a medicine for human, it is more desirable to use structure coordinates of human-type G-CSF and CRH-G-CSF-R. Since designing of an antagonist involves designing of a compound which binds to G-CSF and/or CRH-G-CSF-R, the amino acid residues corresponding to the interacting portions of G-CSF and CRH-G-CSF-R shown in Tables 2, 3, 4, and 5 as well as the regions of amino acid residues adjacent thereto are important among the structure coordinates of G-CSF or CRH-G-CSF-R, and it is also possible that the coordinates of such amino acid residues are selected from Table 1 or 6 and used for designing. Thus, an antagonist may be obtained by selecting the coordinates of the portions corresponding to such amino acid residues and by designing the compound so that it inhibits normal binding between G-CSF and CRH-G-CSF-R to prevent G-CSF from exerting its biological activities.

Antagonists designed by the above techniques may be obtained by commonly used techniques for chemical synthesis

depending on the particular compound.

6. Use of structure coordinates of the complex for
conducting X-ray crystallography by molecular replacement
method

The three-dimensional structure coordinates of G-CSF and CRH-G-CSF-R according to the present invention which are shown in Table 1 or 6 may be used in X-ray crystallography, for example, of crystals containing the whole or part of G-CSF and G-CSF-R or crystals obtained from other proteins which comprise an amino acid sequence having a significant homology to G-CSF or G-CSF-R. Specifically, in a molecular replacement method commonly used in the art as one of techniques for X-ray crystallography (see, e.g., Blundell, T. L. and Johnson, L. N., (1976), PROTEIN CRYSTALLOGRAPHY, pp. 443-464, Academic Press, New York), all or part of the three-dimensional structure coordinates of the complex between G-CSF and CRH-G-CSF-R of the present invention may be used to determine structure coordinates from a structure factor obtained from X-ray diffraction patterns of a crystal without using heavy atom isomorphous replacement methods and much rapidly even for a crystal of a protein having unknown structure coordinates as mentioned above.

For conducting a molecular replacement method, a

computer tuned to run a program for use in the molecular replacement method is used. Examples of such programs include Insight II (commercially available from MSI), X-PLOR (commercially available from Molecular Simulation, Inc.), and AMORE (one of the programs in CCP4 (Collaborative Computational Project, Number 4., *Acta Crystallogr. D* **50**, 670-673 (1994)), but other programs may also be used.

In addition to crystals containing the whole or part of G-CSF and G-CSF-R and crystals obtained from other proteins which comprise an amino acid sequence having a significant homology to G-CSF or G-CSF-R, crystals to which a molecular replacement method should be applied using the three-dimensional coordinates of the complex between G-CSF and CRH-G-CSF-R of the present invention include, for example, crystals obtained from a complex between a compound binding with G-CSF-R (e.g., an agonist or antagonist) and G-CSF-R, a complex between a compound binding with G-CSF (e.g., an antagonist) and G-CSF, G-CSF-R containing amino acid residues other than those described in Table 6, a substance containing a protein having a significant homology to G-CSF at the amino acid level, a substance containing a protein having a significant homology to G-CSF-R at the amino acid level, a variant of G-CSF and a substance containing thereof, a variant of G-

CSF-R and a substance containing thereof, and also include crystals obtained from complexes thereof. The term "significant homology" usually refers to a case wherein the identity of the amino acid sequences is 20% or above, and preferably 30% or above. The validity of application of the molecular replacement method may be determined by actually applying the molecular replacement method to the structure factor calculated from X-ray diffraction pattern of a crystal in question and thereby obtaining a significant solution.

Accordingly, to analyze structure of a crystal of any unknown substance other than those described above by a molecular replacement method using all or part of the three-dimensional structure coordinates of G-CSF and CRH-G-CSF-R is also within the scope of the present invention so long as it yields a significant solution.

EXAMPLES

The present invention is described in more detail with reference to the following working examples. The present invention is, however, not to limited to these examples in any way. The scope of the present invention to be claimed should be defined by the teachings in the sections in detailed description of the invention rather than the specific embodiments shown in the examples.

Example 1Preparation of complex between G-CSF and CRH-G-CSF-R

Mouse-type CRH-G-CSF-R was prepared by the method described in Japanese Patent Application Ser. No. H6-280655 (1994) (Japanese Patent Kokai Publication No. H8-140678 (1996)). In order to obtain a material suitable for crystallization, the CRH-G-CSF-R fraction was further purified by its electrical properties using ion-exchange column chromatography (Mono-S HR10/10, Pharmacia). Human-type G-CSF produced as a recombinant protein in *E. coli* was provided by Kirin Brewery Co., Ltd.

In order to prepare the complex between G-CSF and CRH-G-CSF-R, protein concentrations of G-CSF and CRH-G-CSF-R obtained were each determined by measuring their ultraviolet absorbances, and the proteins were combined using stoichiometrically equivalent quantities calculated from these concentrations or using an excess of G-CSF. The sample was fractionated by gel filtration chromatography (HiLoad Superdex 200 HR26/60, Pharmacia) using a buffer solution consisting of 0.01M 2-(N-morpholino)ethanesulfonic acid (pH 6) containing 0.1M sodium chloride as the mobile phase to yield a highly purified complex between G-CSF and CRH-G-CSF-R.

Example 2Preparation of crystal of the complex between G-CSF and CRH-G-CSF-R

The crystal of the complex between G-CSF and CRH-G-CSF-R was prepared using a vapor diffusion technique describe below. The highly purified complex between G-CSF and CRH-G-CSF-R in Example 1 was adjusted to a protein concentration of 0.5 to 2 mg/ml using a device with an ultrafiltration membrane (Centricon-10, Grace Japan). To 1 to 10 μ l of this protein solution, an equal volume of 0.1M N-2-hydroxyethylpiperazine-N'-2-ethanesulfonic acid buffer solution (pH 7 to 8) containing 1.0 to 1.2 M ammonium sulfate was added as a crystallization solution, mixed, and placed on a glass plate of which surface has been treated with an agent for silicone coating (Sigmacote, Sigma) so as to become hydrophobic. The glass plate surmounted by the sample was put into an air-tight container containing 1 to 5 ml of the crystallization solution, and allowed to stand at 20°C. After standing for 3 days to 1 month, a prismatic crystal having approximate dimensions of 20 μ m x 20 μ m x 150 μ m was obtained. Furthermore, by adding 2 to 10% of 1,4-dioxane to the crystallization solution, a larger crystal having approximate dimensions of 60 μ m x 60 μ m x 600 μ m at the maximum was obtained.

Example 3Crystal structure analysis of the complex between G-CSF and CRH-G-CSF-R

The crystal obtained in Example 2 was soaked in the
5 crystallization solution containing 50% sucrose and then
put under a nitrogen gas stream at 100 K to be flash frozen.
Under a 100 K nitrogen gas stream, X-ray diffraction data
were collected by the oscillation method. In addition, the
crystal obtained in Example 2 was also soaked in the
10 crystallization solution containing 1 mM
ethylmercurithiosalicylate for 6 hours to obtain an
isomorphous derivative crystal containing a mercury atom in
the crystal. The crystal was soaked in the crystallization
solution containing 50% sucrose and then put under a
15 nitrogen gas stream at 100 K to be flash frozen. Under a
100 K nitrogen gas stream, X-ray diffraction data were
collected by the oscillation method. Furthermore, G-CSF in
which methionine residues have been substituted by
selenomethionine residues was obtained by cultivating, in a
20 medium containing selenomethionine, an *E. coli* strain
prepared so as to express G-CSF. Using this G-CSF which
contained substituting selenomethionine residues, a crystal
of the complex between G-CSF which contained
selenomethionine residues substituting for methionine
25 residues and CRH-G-CSF-R was prepared according to the

method described in Example 2. The crystal was soaked in the crystallization solution containing 50% sucrose and then put under a nitrogen gas stream at 100 K to be flash frozen. Under a 100 K nitrogen gas stream, X-ray diffraction data were collected by the oscillation method. From each diffraction data obtained, diffraction amplitudes were converted into numerical forms using DENZO/SCALEPACK (MAC Science Co.) to determine crystal structure factors. At this stage, the crystal belonged to the tetragonal space group $I4_122$ with the unit cell parameters of $a=b=125\pm10$ Å and $c=373\pm10$ Å.

Then, the following analysis was conducted using a series of programs called CCP4. Calculation of the Fourier transform was conducted using difference in diffraction amplitudes obtained by the isomorphous mercury derivative crystal and the native crystal, and from the difference Patterson map obtained, the position of the mercury atom in the unit cell in real space satisfying the map was determined. Using the mercury coordinates obtained, the phase of the native crystal structure factor was determined. Fourier synthesis was made using the phase and absolute values of the crystal structure factors of the selenomethionine-substituted crystal and the native crystal to prepare a difference electron density map and thereby determine the atom coordinates of selenium atoms. In order

to more precisely determine the positions of mercury and selenium atoms, calculation of refinement was conducted using the three crystal structure factors of the native crystal, the mercury derivative and the selenium derivative.

5 Using the phase of native crystal structure factor calculated from the obtained positions of mercury and selenium atom, an electronic density map in real space of the crystal of the complex between G-CSF and CRH-G-CSF-R was obtained. Furthermore, smoothing of the electron
10 density in the solvent region and electron density averaging using non-crystallographic symmetry were conducted, and the sites corresponding to amino acid residues of the complex between G-CSF and CRH-G-CSF-R were identified on the electron density map using QUANTA
15 (Molecular Simulation, Inc.).

Refinement of the positions of the sites corresponding to amino acid residues was then conducted using X-PLOR (Molecular Simulation, Inc.), and amino acid residues were identified using QUANTA. This procedure was repeated to
20 identify the following: as to two molecules of G-CSF each consisting of 175 amino acid residues, structure coordinates of amino acid residues except for M1 to L4, P129 to G136 and the side chain of Q71 in one molecule (Molecule A) and structure coordinates of amino acid
25 residues except for M1 to A7, Q68 to L70 and the side chain

of Q71 in the other molecule (Molecule C); as to two molecules of CRH-G-CSF-R, structure coordinates of amino acid residues except for V123 to S125, K214 to A215 and the side chains of K63, R64, and H126 in one molecule (Molecule B) and structure coordinates of amino acid residues except for A1 to G2, H33 to P35, G120 to S125, K214 to A215 and the side chains of K62, R64, I119, Q127, and M213 in the other molecule (Molecule D); and further one N-acetylglucosamine residue and 182 water molecules.

At this stage, the R factor recognized in the art as an indicator of accuracy of the structure coordinates was 19.5% when a structure factor obtained from a diffraction pattern having Bragg reflection angle of 6 to 2.8 Å was used. An R-factor calculated from a structure factor independently excluded from the calculation for refinement at the refinement stage (known in the art as free-R-factor) was 28.3%. Furthermore, the root mean square errors from the ideal states of bond distances and bond angles among atoms were 0.012 Å and 2.0 degree, respectively.

Example 4

Re-refinement of structure coordinates of the complex between G-CSF and CRH-G-CSF-R

The structure coordinates of the complex between G-CSF and CRH-G-CSF-R obtained in Example 3 were further refined.

Using the crystal structure factor and structure coordinates obtained in Example 3, calculations with REFMAC (in CCP4 programs) and X-PLOR and model modification with QUANTA were repeated to identify the following: structure coordinates of amino acid residues except for M1 to L4 and the side chain portions of Q71 and L131 in one molecule (Molecule A) of two molecules of G-CSF each consisting of 175 amino acid residues; structure coordinates of amino acid residues except for M1 to P6, and the side chain portions of H53, W59, Q68, L70, Q71 in Molecule C of G-CSF; structure coordinates of amino acid residues except for G120 to H126, K214 to A215 and the side chain portions of K63 and R64 in Molecule B of CRH-G-CSF-R; structure coordinates of amino acid residues except for A1, I119 to H126, K214 to A215 and the side chain portions of K62, K63, R64, Q127 in Molecule D of CRH-G-CSF-R; and further two N-acetylglucosamine residues and 260 water molecules. At this stage, the R factor recognized in the art as an indicator of accuracy of the structure coordinates was 22.2% when a structure factor obtained from a diffraction pattern having Bragg reflection angle of 25 to 2.8 Å was used. An R-factor calculated from a structure factor independently excluded from the calculation for refinement at the refinement stage (known in the art as free-R-factor) was 29.8%. Furthermore, the root mean square errors from

the ideal states of bond distances and bond angles among atoms were 0.014 Å and 1.9 degree, respectively.

Structure coordinates obtained were shown in Table 1 according to the format of Protein Data Bank, a notation system commonly used in the art.

Example 5

Molecular replacement method using structure coordinates of G-CSF and CRH-G-CSF-R

The crystal of the complex between G-CSF and CRH-G-CSF-R obtained in Example 2 was soaked in 0.1 M N-2-hydroxyethylpiperazine-N'-2-ethanesulfonic acid buffer solution containing 20% glycerol and 2.4 M ammonium sulfate for one day and then put under a nitrogen gas stream at 100 K to be flash frozen. Under cooling with a 100 K nitrogen gas stream, X-ray diffraction data were collected by the oscillation method. Each diffraction pattern was converted into a structure factor using DENZO/SCALEPACK. At this stage, the crystal belonged to the tetragonal space group $P4_12_12$ or $P4_32_12$ with the unit cell parameters of $a=b=126\pm10$ Å and $c=373\pm10$ Å. It was thus demonstrated that the crystal obtained in Example 2 changed its space group from $I4_122$ to $P4_12_12$ or $P4_32_12$ by being soaked in a solution containing a high concentration of ammonium sulfate.

Using a structure factor obtained and three-

dimensional structure coordinates of the complex between G-CSF and CRH-G-CSF-R shown in Table 1, a molecular replacement method was conducted (see, e.g., Blundell, T. L. and Johnson, L. N., (1976), PROTEIN CRYSTALLOGRAPHY, pp. 443-464, Academic Press, New York). For this molecular replacement method, rigid-body refinement of X-PLOR was used. A structure factor obtained from a diffraction pattern having Bragg reflection angles of 8 to 3.5 Å was used for calculations. The R factor was 31.7%. Three-dimensional structure coordinates of the complex between G-CSF and CRH-G-CSF-R having a new structure were thereby obtained. It was also shown that the space group was $P4_32_12$. The obtained structure coordinates indicated that the complex between G-CSF and CRH-G-CSF-R contains four molecules of the complex in the asymmetric unit. It was also shown that when compared with the structure obtained from the $I4_122$ crystal, the structure obtained was different in the angle between G-CSF molecule and CRH-G-CSF-R molecule and in the angle between domains of CRH-G-CSF-R by several degrees, indicating that these molecular recognitions have variability within several degrees.

Example 6

Structure coordinates of human-type G-CSF-R

Based on the structure coordinates obtained in Example

4, structure coordinates of human-type CRH-G-CSF-R shown in
SEQ ID NO: 3 were prepared using a homology model (Haruki
Nakamura and Kenta Nakai, "Biotechnology-no-tamenon-
Computer-nyumon" (An introduction to computers for
5 biotechnology), pp. 186-204, Corona Publishing Co., 1995).
First, in the structure coordinates of mouse CRH-G-CSF-R
shown in Table 1, side chain portions of the positions at
which amino acid residues are not identical between mouse
and human CRH-G-CSF-Rs were replace by corresponding side
10 chains of the human amino acid residues. This replacement
of amino acid residues was conducted using a biopolymer
energy calculation program PRESTO 2.0 on the above
described workstation Indy XZ. At this stage,
conformations of the side chains were selected so that the
15 atoms do not stereochemically overlap one another and the
energy became minimal. This calculation was conducted
using programs Side-Chain Modeller and PRESTO 2.0 on the
above workstation Indy XZ. Furthermore, conformational
calculations were conducted for all amino acid residues
20 including their backbone portions to minimize the energy of
the whole molecule. This calculation was conducted using
the program PRESTO 2.0 on the above workstation Indy XZ.
The coordinates thus obtained are shown in Table 6.

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CLAIMS

1. A crystal of a protein complex between granulocyte colony-stimulating factor (G-CSF) and the G-CSF binding region (CRH-G-CSF-R) of the granulocyte colony-stimulating factor receptor (G-CSF-R).

2. A crystal of a protein complex according to claim 1 wherein G-CSF and CRH-G-CSF-R are derived from a mammal or mammals.

3. A crystal of a protein complex according to claim 2 wherein G-CSF comprises a human-type sequence shown in SEQ ID NO: 1, and CRH-G-CSF-R comprises a mouse-type sequence shown in SEQ ID NO: 2.

4. A crystal according to any one of claims 1 to 3 wherein the crystal has the tetragonal space group symmetry $I4_122$.

5. A crystal according to claim 4 wherein the unit cell parameters of the crystal are $a=b=125\pm 10$ Å and $c=373\pm 10$ Å.

6. A crystal according to any one of claims 1 to 3 wherein the crystal has the tetragonal space group symmetry $P4_32_12$.

7. A crystal according to claim 6 wherein the unit cell parameters of the crystal are $a=b=126\pm 10$ Å and $c=373\pm 10$ Å.

8. A crystal according to any one of claims 1 to 7 wherein stoichiometrically equivalent quantities of G-CSF and CRH-G-CSF-R bind together to form the complex.

9. A crystal according to any one of claims 1 to 5 wherein stoichiometrically equivalent quantities of G-CSF and CRH-G-CSF-R bind together to form the complex and two molecules of the complex exist in a crystallographic asymmetric unit.

10. A crystal according to any one of claims 1 to 3, 6, and 7 wherein stoichiometrically equivalent quantities of G-CSF and CRH-G-CSF-R bind together to form the complex and four molecules of the complex exist in a crystallographic asymmetric unit.

11. A crystal according to any one of claims 1 to 10 wherein the regions forming the complex between G-CSF and CRH-G-CSF-R are characterized by all or part of amino acid residues S13, L16, K17, E20, Q21, R23, K24, L109, D110, D113, T116, T117, Q120, E123, E124 and amino acid residues adjacent thereto in the amino acid sequence of human-type G-CSF shown in SEQ ID NO: 1.

12. A crystal according to any one of claims 1 to 10 wherein the regions forming the complex between G-CSF and CRH-G-CSF-R are characterized by all or part of amino acid residues N20, S45, R46, R72, K73, L75, L76, L77, Y78, Q79, Y80, D102, M104, D105, Y143, M144, E145, R193, S195, L196

and amino acid residues adjacent thereto in the amino acid sequence of mouse-type CRH-G-CSF-R shown in SEQ ID NO: 2.

13. A crystal according to any one of claims 1 to 10 wherein the regions forming the associate of the complex between G-CSF and CRH-G-CSF-R are characterized by all or part of amino acid residues G5, P6, A7, S8, S9, L10, P11, Q12, L125 and amino acid residues adjacent thereto in the amino acid sequence of human-type G-CSF shown in SEQ ID NO: 1.

14. A crystal according to any one of claims 1 to 10 wherein the regions forming the associate of the complex between G-CSF and CRH-G-CSF-R are characterized by all or part of amino acid residues W161, L163, V164, F165, H166, L167, P168, and K171 and amino acid residues adjacent thereto in the amino acid sequence of mouse-type CRH-G-CSF-R shown in SEQ ID NO: 2.

15. A crystal according to any one of claims 1 to 10 wherein amino acid residues exposed to the solvent region on the side of the binding surface formed by the associate of the complex between G-CSF and CRH-G-CSF-R were characterized by all or part of amino acid residues Y3 to L14, R46 to Y51, G92 to V106, E145 to E147, H166 to S169, S194 to G198 and amino acid residues adjacent thereto in the amino acid sequence of mouse-type CRH-G-CSF-R shown in SEQ ID NO: 2.

16. Three-dimensional structure coordinates of a complex formed by G-CSF and CRH-G-CSF-R for use in identifying, searching for, evaluating, or designing variants, agonists, or antagonists of G-CSF.

5 17. Three-dimensional structure coordinates according to claim 16 wherein the three-dimensional structure coordinates are those shown in Table 1.

10 18. Three-dimensional structure coordinates according to claim 16 wherein the three-dimensional structure coordinates are those of a complex between G-CSF derived from a species other than human comprising a sequence having 20% or more homology to the amino acid sequence of human-type G-CSF and CRH-G-CSF-R derived from a species other than mouse comprising a sequence having 20% or more
15 homology to the amino acid sequence of mouse-type CRH-G-CSF-R determined by a molecular replacement method or using a homology model.

20 19. Three-dimensional structure coordinates according to claim 18 wherein the three-dimensional structure coordinates are those shown in Table 6.

25 20. A computer storage medium storing all or part of the three-dimensional structure coordinates according to any one of claims 16 to 19 for use in identifying, searching for, evaluating, or designing a variant, agonist, or antagonist of G-CSF.

21. Use of all or part of the three-dimensional structure coordinates according to any one of claims 16 to 19 or the computer storage medium according to claim 20 for identifying, searching for, evaluating, or designing a variant, agonist, or antagonist of G-CSF.

22. Use of claim 21 characterized in that the three-dimensional structure coordinates are those of amino acid residues shown in Tables 2 to 5 or amino acid residues adjacent thereto.

23. A method of identifying, searching for, evaluating, or designing a G-CSF variant which has biological activities equal or superior to those of native G-CSF and in which one or more amino acid residues have been substituted, deleted, inserted, or chemically modified, the method being characterized in that it uses all or part of the three-dimensional coordinates according to any one of claims 16 to 19 or the computer storage medium according to claim 20.

24. A method of identifying, searching for, evaluating, or designing a G-CSF variant which has activity as an antagonist and in which one or more amino acid residues have been substituted, deleted, inserted, or chemically modified, the method being characterized in that it uses all or part of the three-dimensional coordinates according to any one of claims 16 to 19 or the computer

storage medium according to claim 20.

25. A method according to claim 23 or 24 wherein the variant is substitution, deletion, insertion, or chemical modification of one or more of amino acid residues G5, P6, A7, S8, S9, L10, P11, Q12, S13, L16, K17, E20, Q21, R23, K24, L109, D110, D113, T116, T117, Q120, E123, E124, L125 and amino acid residues adjacent thereto in human-type G-CSF shown in SEQ ID NO: 1.

26. A G-CSF variant in which one or more of amino acid residues G5, P6, A7, S8, S9, L10, P11, Q12, S13, L16, K17, E20, Q21, R23, K24, L109, D110, D113, T116, T117, Q120, E123, E124, L125 and amino acid residues adjacent thereto have been substituted, deleted, inserted, or chemically modified in human-type G-CSF shown in SEQ ID NO: 1.

27. A method of identifying, searching for, evaluating, or designing a G-CSF agonist, the method being characterized in that it uses all or part of the three-dimensional structure coordinates according to claims 16 to 19 or the computer storage medium according to claim 20.

28. A method according to claim 27 wherein it particularly uses three-dimensional coordinates of the positions corresponding to amino acid residues Y3 to L14, R46 to Y51, G92 to V106, E145 to E147, H166 to S169, S194 to G198 and amino acid residues adjacent thereto among those shown in Table 1 or 6.

29. A method according to claim 27 or 28 wherein the agonist binds to CRH-G-CSF-R and thereby provides spatial positions of CRH-G-CSF-R substantially identical to those of the CRH-G-CSF-R in the associate of the complex between
5 CHR-G-CSF-R and G-CSF and wherein the agonist binds to CRH-G-CSF-R at two or more sites.

30. A compound which is an agonist of G-CSF and is obtained using a method of drug design according to any one of claims 27 to 29.

10 31. A compound according to claim 30 wherein the agonist of G-CSF is a natural or synthetic compound.

32. A method of identifying, searching for, evaluating, or designing an antagonist of G-CSF, the method being characterized in that it uses all or part of the
15 three-dimensional coordinates according to any one of claims 16 to 19 or the computer storage medium according to claim 20.

33. A method according to claim 32 wherein the antagonist is a compound which binds to G-CSF and inhibits
20 binding of G-CSF to G-CSF-R.

34. A method according to claim 32 wherein the antagonist is a compound which binds to CRH-G-CSF-R and inhibits binding of G-CSF to G-CSF-R.

35. A method according to claim 32 wherein the
25 antagonist is a compound which binds to the complex between

G-CSF and G-CSF-R and inhibits normal binding between G-CSF and G-CSF-R.

36. A compound which is an antagonist of G-CSF and is obtained using a method according to any one of claims 32 to 35.

37. A compound according to claim 36 wherein the antagonist of G-CSF is a natural or synthetic compound.

38. Use of all or part of the three-dimensional structure coordinates according to any one of claims 16 to 19 or the computer storage medium according to claim 20 in crystallography using the technique of molecular replacement.

ABSTRACT

Crystals of a protein complex composed of granulocyte colony-stimulating factor (G-CSF) and the G-CSF binding region of a G-CSF receptor; and the structural coordinate of each atom determined by the crystallography procedure from these crystals. By using this structural coordinate, it is possible to identify, search, evaluate or design a G-CSF mutant which has a biological activity higher than native G-CSF or an inhibitory activity on G-CSF and is derived by substitution, deletion, insertion or chemical modification of one or more amino acid residues, an agonist which is a compound having a biological activity comparable or superior to the biological activity of G-CSF, and an antagonist which is a compound inhibiting the biological activity of G-CSF.

SEQUENCE LISTING

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0014619 001901

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Cys Gln Tyr Gln Gly Asp Thr Ile Pro Asp Cys Val Ala Lys Lys Arg
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0014619-001901

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Cys Gln Thr Gln Gly Asp Ser Ile Leu Asp Cys Val Pro Lys Asp Gly		
50	55	60
Gln Ser His Cys Cys Ile Pro Arg Lys His Leu Leu Leu Tyr Gln Asn		
65	70	75
Met Gly Ile Trp Val Gln Ala Glu Asn Ala Leu Gly Thr Ser Met Ser		
85	90	95
Pro Gln Leu Cys Leu Asp Pro Met Asp Val Val Lys Leu Glu Pro Pro		
100	105	110
Met Leu Arg Thr Met Asp Pro Ser Pro Glu Ala Ala Pro Pro Gln Ala		
115	120	125
Gly Cys Leu Gln Leu Cys Trp Glu Pro Trp Gln Pro Gly Leu His Ile		
130	135	140
Asn Gln Lys Cys Glu Leu Arg His Lys Pro Gln Arg Gly Glu Ala Ser		
145	150	155
Trp Ala Leu Val Gly Pro Leu Pro Leu Glu Ala Leu Gln Tyr Glu Leu		
165	170	175
Cys Gly Leu Leu Pro Ala Thr Ala Tyr Thr Leu Gln Ile Arg Cys Ile		
180	185	190
Arg Trp Pro Leu Pro Gly His Trp Ser Asp Trp Ser Pro Ser Leu Glu		
195	200	205
Leu Arg Thr Thr Glu Arg Ala		
210	215	

000114310:001001

Fig. 1

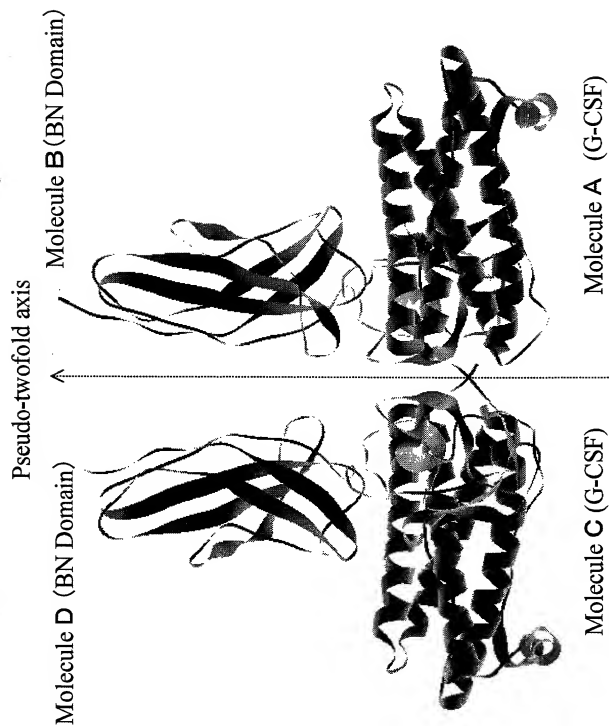


Fig. 2

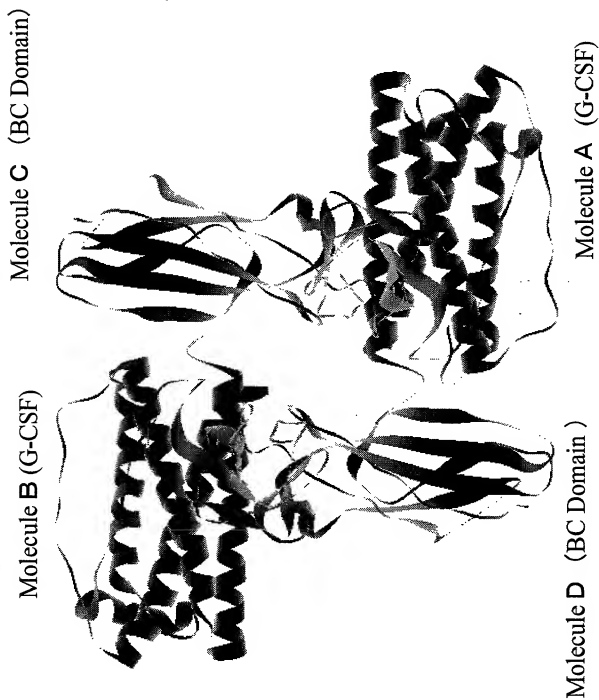
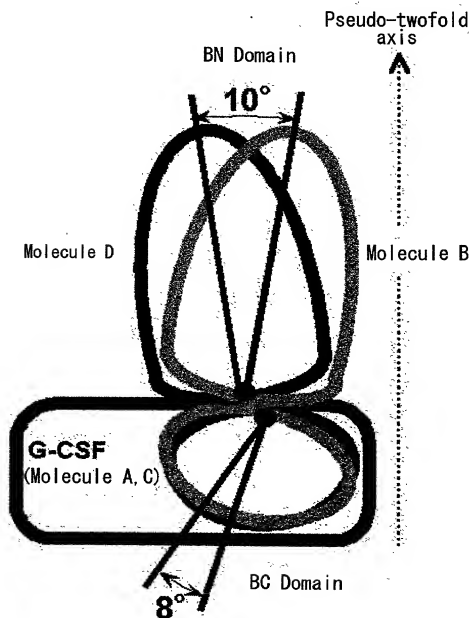


Fig. 3



#3

DECLARATION AND POWER OF ATTORNEY FOR U. S. PATENT APPLICATION

☒ Original ☐ Supplemental ☐ Substitute ☐ PCT ☐ Design

As a below named inventor, I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; that I verily believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Crystals and structural coordinates of protein complex and
 Title: utilization of the structural coordinates

of which is described and claimed in:

☐ the attached specification, or
☐ the specification in the application Serial No. _____ filed _____;
 and with amendments through _____ (if applicable), or

☒ the specification in International Application No. PCT/JP00/01217, filed March 2, 2000, and as amended
 on _____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment(s) referred to above.

I acknowledge my duty to disclose to the Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

I hereby claim priority benefits under Title 35, United States Code, §119 (and §172 if this application is for a Design) of any application(s) for patent or inventor's certificate listed below and have also identified below any application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:


COUNTRY	APPLICATION NO.	DATE OF FILING	PRIORITY CLAIMED
Japan	056905/1999	March 4, 1999	Yes
Japan	218691/1999	August 2, 1999	Yes

I hereby claim the benefit under Title 35, United States Code §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code §112, I acknowledge the duty to disclose information material to patentability as defined in Title 37, Code of Federal Regulations, §1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

APPLICATION SERIAL NO.	U.S. FILING DATE	STATUS: PATENTED, PENDING, ABANDONED

And I hereby appoint Michael R. Davis, Reg. No. 25,134; Matthew M. Jacob, Reg. No. 25,154; Warren M. Cheek, Jr., Reg. No. 33,367; Nils Pedersen, Reg. No. 33,145; Charles R. Watts, Reg. No. 33,142; and Michael S. Huppert, Reg. No. 40,268, who together constitute the firm of WENDEROTH, LIND & PONACK, L.L.P., as well as any other attorneys and agents associated with Customer No. 000513, to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected therewith.

I hereby authorize the U.S. attorneys and agents named herein to accept and follow instructions from _____ as to any action to be taken in the U.S. Patent and Trademark Office regarding this application without direct communication between the U.S. attorneys and myself. In the event of a change in the persons from whom instructions may be taken, the U.S. attorneys named herein will be so notified by me.

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I further declare that all statements made herein of my own knowledge are true, and that all statements on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

1st Inventor Masaharu Aritomi Masaharu ARITOMI Date 24th, Aug. 2001
 2nd Inventor Naoki Kunishima Naoki KUNISHIMA Date 24th, Aug. 2001
 3rd Inventor Kosuke Morikawa Kosuke MORIKAWA Date The 23rd of Aug., 2001
 4th Inventor _____ Date _____
 5th Inventor _____ Date _____
 6th Inventor _____ Date _____
 7th Inventor _____ Date _____

The above application may be more particularly identified as follows:

U.S. Application Serial No. _____ Filing Date _____
 Applicant Reference Number _____ Atty Docket No. _____
 Title of Invention _____